

July 15, 1998.

To Our Valued Audio Customers:-

Welcome to The Parts Connection Catalog - Volume 4 ! This catalog marks the beginning of a major update to the format of our catalog design - while we have, and will continue, to revise and expand our product offerings, we have made the decision, to eliminate our extensive "resource" section. This is not to say we do not feel this section had any value, or that you, our valued customer, did not seem to accrue any benefit from it's inclusion - on the contrary. Instead, what we have decided to do is re-locate this information onto our WEB SITE....thereby allowing us to greatly decrease the size and weight of the printed catalog. The major benefit to us was a reduction in printing, mailing and distribution costs... however, of greater significance was that we have now been able to eliminate the \$10 US charge per catalog ...which was needed to offset the high printing and postage expenses of our previously large format, heavy catalogs. Not only is this a savings to our customers directly, we can now significantly expand our catalog distribution worldwide. In essence, we've added a lot more steak to this catalog, and re-located the sizzle to the information super highway.

Speaking of the internet, over the past 18 months, we have seen an explosion in traffic to both our WEB SITE and in E-Mail correspondence/orders...and we do not see this trend slowing down any time soon. Therefore, over the coming months, we will not only shift the resource section to our web site (allowing us to add to this section the moment we have some interesting new information, data sheets, schematics, white papers, etc...) but, we intend to put our entire catalog on-line....and add a full electronic shopping cart system with secure/encrypted credit card transaction processing! This project will begin later this summer and become fully operational by late fall 1998.

With regard to this, our 4th full-line catalog, we have made so many changes and additions, they are simply too numerous to mention here. Needless to say, it is more than just an update; it is a whole new catalog! As such, we recommend a full review of it's contents, even if you are a long-time TPC customer. The best part is that this is just the beginning - we are going to dramatically expand the mandate of THE PARTS CONNECTION over the coming months to include not only more electronic parts and components, but to expand our ASSEMBLAGE kit line-up dramatically; add test and measurement equipment as well as audio-related computer software; develop a comprehensive hardware section; offer an expanded line-up of tools; begin to enter the speaker drivers/kits market; stock a larger array of phono/analog-related components/accessories; add a separate section for music software - both digital and analog, etc... As you can gather, we have a busy schedule planned over the next year and beyond.

In addition, if all goes according to plan (and Murphy takes a holiday), our BREADBOARD supplements will come out on a quarterly basis (both in printed form and on the WEB), and our Volume 5 catalog will be available in January 1999. For now, we thank you for your past patronage and hope that you find everything you possible could/would want for your DIY project needs.

NOTE: Oh yes, don't forget to fill out (and return) the enclosed customer service survey - this is very important to us - not only so that we know what you want us to carry/offer in the future, but to grade us on how well (or poorly) we have served you in the past.

Now, let us leave you with TPC's very own audio hobbyist mottomay your lead never break, your solder always wick, your tube never short, your semi always conduct!!!!

Sincerely,
The Parts Connection (TPC) Staff
& Sonic Frontiers Management.



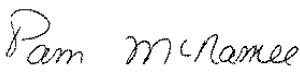
Judith Luksander,
Operations Manager - TPC.



Glenn Dolick,
Product Manager - TPC.
Design Technician - SFI.



Vincent Siu,
Technical Support Specialist - TPC.



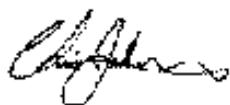
Pam McNamee,
Sales Representative - TPC.



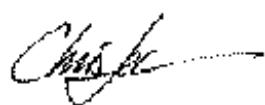
Jerry Kulacz,
Sales Representative - TPC.



Frank Pugliano,
Order Fulfillment/Shipping - TPC.



Chris Johnson,
President - SFI.



Chris Jensen,
VP, Sales & Marketing - SFI.

THE PARTS CONNECTION CATALOG
VOLUME 4

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KIT PRODUCTS & UPGRADES



A S S E M B L A G E L - 1 P R E A M P L I F I E R

The L-1 is an improved and refined version of the original Sonic Frontiers SFL-1 preamplifier (which retailed for \$1400 USD between 1991 and 1996). We've taken the same basic circuit topology, made more than a few changes, added many improvements, and hey presto - a new incarnation of a classic pre-amp. This unit has 5 inputs (4 normal, 1 direct), tape in/out, and two sets of output jacks (makes bi-amping a whole lot easier), stereo/mono switch, mute, tape, and direct/normal switching. Rotary controls include high quality Noble Balance and Volume pots. The standard tube for this unit is the Sovtek 6922, however, the L-1 can be easily and quickly configured to utilize 12AT7 tube types as well. Standard parts includes high quality components from Multicap, Wima, Solen, Holco, Bourns, Kimber, Telefunken, CTS and Panasonic. Performance-wise, this unit has a very low noise floor, -95dB A-weighted below 1VRMS o/p, extended bandwidth, only -.37 dB at 120kHz, and with +20dB of gain, can output over 30 volts RMS (that's a lot of grunt!). Sonically, the L-1 can be characterized as being very neutral, with just a hint of warmth (due to the contributed musicality of the tube). The L-1 has excellent retrieval of low level information, fleshing out the soundstage with lots of detail, yet spares nothing when it comes to recreating extremely dynamic passages.

Assemblage L-1 Preamplifier Kit

SKU#	Description	Price \$US
57652	L-1 Tube Preamp Kit	\$599.00
58506	L-1 Signature Parts Upgrade Kit	\$299.00
57756	L-1 Kit w/Parts Upgrade Kit	\$875.00
57757	L-1 Assembled Preamp Kit - 100-120V	\$799.00
57758	L-1 Assembled Preamp Kit - 220-240V	\$799.00
57759	L-1 Assembled w/Parts Upgrade Kit - 100-120V	\$1075.00
57760	L-1 Assembled w/Parts Upgrade Kit - 220-240V	\$1075.00

Assembly Time for each kit: 6 to 8 hours

Weight: 8Kg Chassis Size: 14" x 10.5" x 3.25"



A S S E M B L A G E S T - 4 0 P O W E R A M P L I F I E R

The ST-40 should become the classic of it's type and generation. Putting out in excess of 40 w/ch (closer to 50 watts if the truth be told) @ <1% THD, 20Hz to 20kHz, both channels driven, this compact power-house is an unbelievable buy. The input(driver stage uses a classic configuration of a 12AX7 feeding a pair of 12AU7's (these stages are regulated of course), feeding two pairs of EL34's. All this equates to about 23dB of gain with an I/P sensitivity of 1.3V for rated power. Also choose from 4, 8 or 16 ohm speaker loads. The kit includes an impressive selection of quality parts from Multicap, Holco, Roderstein, Wima, and Kimber Kable in addition to the TPC custom-designed Hammond manufactured output and power transformers. Listen to what Soundstage! has to say!

"The midrange was phenomenal. For a \$699 amp, the ST-40 shows what every single solid-state amp (that I know of) under \$2000 does wrong. Liquid implies a coloration, and while I can't truly call the ST-40 100% neutral, liquid would be going too far. I much prefer natural. Female vocals were recreated with all their overtones intact. Guitars had wood and string. Pianos had hammers, strings, sounding boards and lids. And all were beautifully placed in my room."

Todd Warnke, Soundstage! May '98

Assemblage ST-40 Power Amplifier

SKU#	Description	Price \$US
57653	ST-40 Stereo Amplifier Kit	\$699.00
58507	ST-40 Signature Parts Upgrade Kit	\$249.00
57751	ST-40 Kit w/Parts Upgrade Kit	\$925.00
57752	ST-40 Stereo Amplifier Kit Assembled - 100-120V	\$899.00
57753	ST-40 Stereo Amplifier Kit Assembled - 220-240V	\$899.00
57754	ST-40 Kit Assembled w/Upgrade Kit- 100-120V	\$1125.00
57755	ST-40 Kit Assembled w/Upgrade Kit- 220-240V	\$1125.00

Assembly Time for each kit: 4 to 6 hours

Weight: 18Kg Chassis Size: 14" x 10." x 5.5"

DEALER INQUIRIES WELCOME ON ALL ASSEMBLAGE PRODUCTS



A S S E M B L A G E

D A C - 2 D I G I T A L P R O C E S S O R

Reviewers Agree: A lot of DAC for the money.

"The DAC-2 is the best D/A I've ever had in my system, revealing musical details on familiar recordings that I was previously unaware of."

Muse Kastano *vich, Stereophile, Vol. 20 No. 1, January 1997*

"The DAC-2 is another well-engineered product from Sonic Frontiers. The unit had better bench performance than many more expensive processors. In particular, the DAC-2 had low crosstalk, very low noise, good linearity, and excellent reproduction of low-level signals."

Robert Harley, *Stereophile, Vol. 20 No. 1, January 1997*

"If I had to choose between it and a stock [Audio Alchemy] DDE v.3.0, I'd take the DAC-2. ...it scores big points for its clarity, staging, liveliness, tonal accuracy and superb timing. These are details which make music exciting and involving. They also make the DAC-2 exciting and involving."

Todd Warnke, *Soundstage! (http://www.sstage.com)*, January 1997

"With the HDCD™ decoder now working for its living the sound became even clearer, crisper and more natural. Detail retrieval improved but most importantly, all the good things the DAC-2 was doing before were more obvious."

Ketan Baharadia, *HiFiWorld, Supplement No. 29, June 1997*

"By comparison, the Chroma seemed to slightly blunt leading edge transients and momentarily hide detail. Both (the Chroma and DAC-2) were easy to listen to and maintained their composure while handling dynamic extremes but the DAC-2 definitely had the edge at accurately revealing details ...

... the DAC-2 Upgrade was superior to my original DAC-2. Acoustic images were cleaner with better defined transients."

Jim Ha yward, *Audio Ideas Guide, Volume 17 #1*

"The parts upgrade improves the sense of air and space, and renders delicately scored passages with greater liquidity. Dynamics and inner detail are also improved and the treble region is smoother and more transparent. I highly recommend the upgrade kit. Not only does it provide a substantial improvement in sonic performance, easily worth the \$150, but it is also an excellent tutorial on modifying equipment."

Gary A. Gallo, "Reprinted, with permission, from *Audio Electronics*, Issue 5, 1997, p. 37, of *Audio Electronics* magazine. © Copyright 1997 by Audio Amateur Corporation, P.O. Box 576, Peterborough, NH 03454, USA. All rights reserved."

Summer Over-Stock Sale
*This summer is hot and so are our DAC 2 prices!
 Prices reduced on a limited quantity, order now!*

The DAC-2 is a complete re-design of the original. While it remains the same on the outside, there are many changes on the inside. The completely new main pc board incorporates the Crystal CS 8412 digital receiver, the Pacific Microsonics PMD-100 HDCD decoder and digital filter, and again the outstanding Burr Brown PCM-1702 20 Bit DAC's (One per channel). There is an improved power supply with greater filter capacitance and three more voltage regulation stages for a total of eight (four fixed and four adjustable). The analog output stage has also been improved with better parts quality including the new Analog Devices AD817 high speed output buffer, Holco metal film resistors, and machined gold plated IC sockets. Non-HDCD attenuation is performed in the analog domain, retaining the superior resolution of the 20 Bit DAC's. We have also added an extra co-ax digital input on a BNC jack, and a phase inversion switch.

As before, the DAC-2 comes with a fully assembled and tested main board, and a comprehensive, fully illustrated instruction manual. The best news is the last ...all these improvements come at an incremental \$50.00 over the original DAC-1. The DAC-2 Digital Processor kit is available for only \$499.00 USD!!

We are also offering an optional Parts Upgrade Kit (\$149.00 USD) with MultiCap capacitors, Caddock metal film resistors, Kimber silver hook-up wire and RCA output jacks, Linear technology voltage regulators, high speed diodes, chassis dampening, and more - 41 major component upgrades in all! The upgrade kit also comes with a very comprehensive manual, detailing all the steps necessary to implement the upgrade. Please note however, that this kit is NOT as simple to put together as the DAC-2 is. This is a kit for the advanced amateur. If you are in doubt of your abilities, get us to install the kit (for an additional \$100.00 USD), or find someone else who can.

SKU#	Description	Price \$US	Sale Price*
56658	Assemblage DAC-2 Digital Processor Kit 100-240V	\$499.00	\$449.00
56975	Assemblage DAC-2 Digital Processor Kit "Assembled", 100-120V	\$549.00	\$499.00
57176	Assemblage DAC-2 Digital Processor Kit "Assembled", 200-240V	\$549.00	\$499.00
57224	Assemblage DAC-2 Parts Upgrade Kit	\$149.00	
57366	Assemblage DAC-2 Kit with Parts Upgrade Kit, "Assembled"	\$748.00	\$699.00

*While quantities last, June 1 to August 31 1998.

Assembly Time Basic kit: 1 hour

Assembly Time Upgrade kit: 2 to 3 hours

Weight: 3.5Kg Chassis Size: 8.5" x 7" x 1.75"

NEW

*Special Introductory Offer*

A S S E M B L A G E

U J B - 1 U L T R A J I T T E R B U G

THE ASSEMBLAGE UJB-1 ENHANCES THE PERFORMANCE OF VIRTUALLY ANY HIGH END DIGITAL-TO-ANALOG PROCESSOR.

In response to the increasing understanding of word-clock jitter as a major barrier to the improved sonic performance of digital audio, The Parts Connection reissues a product that verifiably and significantly reduces jitter. The UJB-1 is a digital reclocker that reduces and rejects jitter from a digital source such as a CD player or DAT machine, and supplies a "clean" signal to a digital-to-analog processor.

The UJB-1 has three digital inputs - AES/EBU via XLR and S/PDIF via RCA coax and Toslink plastic fibre optic - which feed the new UltraAnalog AES21 AES/EBU ultra-low jitter input receiver. The AES21 receives the digital input data, decodes it and attenuates the jitter that is present on the incoming digital data stream.

Many special measures were taken to reduce contaminating noise and to prevent crosstalk. The inputs and outputs are isolated by their own custom, wide bandwidth, low capacitance pulse transformer. These transformers prevent any common mode noise in the digital signal from being coupled into the sensitive internal circuitry of the UJB-1 and the DAC. They also prevent the formation of a low frequency (ground loop) connection with the UltraJitterbug which could significantly increase 60Hz "hum", as well as couple the data that is desired to be passed without limiting the bandwidth ("droop").

Further, the inputs are multiplexed relays which provide low impedance paths for the selected signals to pass through and high isolation between the selected input and the other unused inputs. Careful trace routing and guarding insure that the PC layout does not contribute to crosstalk. Separate ground planes are used for each circuit section to keep the noise of one section from contaminating another.

The power supply is a full linear regulated design with four separate linear regulators. The digital and analog power supplies are provided with separate regulators and the output driver has its own regulator to insure that the output is as free from unwanted noise as possible. The design of the power supply is conservative to insure that the temperature of the regulators remains low under all operating conditions thereby providing a very long operating life.

The UltraJitterbug is built under strict quality control utilizing the highest calibre of parts available. With its proven performance in the improvement of a digital signal through jitter rejection, the UJB-1 is a truly affordable upgrade to your existing digital-to-analog processor.

TECHNICAL SPECIFICATIONS

Jitter Rejection	Begins at 1 kHz, at a rate of 6 dB per octave (attenuation)	Price \$US
Intrinsic Jitter	Less than 40 ps (picoseconds) output	
Dimensions	9.5" Wide x 7" Deep x 2" High (24 cm x 17.8 cm x 5 cm)	

SKU#	Description	Price \$US
58534	Assemblage UJB-1 100-120V	\$499.00
58535	Assemblage UJB-1 220-240V	\$499.00
Assembly Time Basic kit: 1/2 hour		
Weight: 3.5Kg Chassis Size: 8.5" x 7" x 1.75"		

Assemblage UJB-1 Special Introductory Offer

As an introductory offer the Assemblage UJB-1, UltraJitterbug will be discounted further when purchased with one of the Assemblage DAC kits.

Purchase with a Assemblage DAC 2.0	SAVE \$50
Purchase with a Assemblage DAC 2.5	SAVE \$75
Purchase with a Assemblage DAC 3.0	SAVE \$100

DEALER INQUIRIES WELCOME ON ALL ASSEMBLAGE PRODUCTS

UPCOMING ASSEMBLAGE KITS!

(Prices and specifications may change without notice.)



THE ASSEMBLAGE ST-300B SE STEREO POWER AMPLIFIER.

Available Fall 1998

Still progressing nicely on this project - we've built the ultimate 300B prototype amp. Now we're figuring out how to make it less complex, simpler to build, and easier on the wallet without sacrificing performance. A tall order, but we know we can do it! Stay tuned by checking our Web Site!

Design Features:

- Single Ended 300B Output Stage for a whopping 7-8 watts of power
- Zero global negative feedback
- 4 and 8 Ohm output taps
- Tube rectified B+ using 2 Mullard CV378/GZ37s
- Custom designed output transformers
- Robust power supply with PI type (capacitor-choke-capacitor) filter for low noise.
- LCR Electrolytic power supply caps.
- Open chassis design to show off those 300B's with a black powder coated finish and black anodized aluminum front panel.
- Kit comes with all tubes except 300B's (we'll leave the choice of those up to you!) complete, illustrated assembly manual, and high quality parts.
- Upgrade kit available, Multi Caps, Vishay Resistors.

Assembly Time Basic kit: 4 to 6 hours

Assembly Time Upgrade kit: 2 to 3 hours

Weight: 25Kg Chassis Size: 14" x 10" x 5.5"

AD811 to replace the AD844 in the I-V position.

SKU#	Description	ESTIMATED Price \$US
58746	Assemblage DAC-2.5 Digital Processor Kit 100-240V	\$699.00
58846	Assemblage DAC-2.5 Digital Processor Kit 100-120V "Assembled"	\$749.00
58847	Assemblage DAC-2.5 Digital Processor Kit 200-240V "Assembled"	\$749.00
58849	Assemblage DAC-2.5 Parts Upgrade Kit	\$149.00
58850	Assemblage DAC-2.5 Kit with Parts Upgrade Kit "Assembled"	\$949.00

Assembly Time Basic kit: 1 hour

Assembly Time Upgrade kit: 2 to 3 hours

Weight: 3.5Kg Chassis Size: 8.5" x 7" x 1.75"



THE ASSEMBLAGE DAC-3 24 Bit & HDCD

Available Fall 1998

Will you be the first on your block with 96K 24 BIT AUDIO? Yes, 24 Bit in a Kit! No, this is not a mistake! If we seem to be repeating ourselves, and for the umpteenth time, it is for a VERY good reason!!! Get ready for this.....

Design Features:

- 24 Bit - 96kHz sampling rate capability, with 24 Bit DAC resolution.
- 6, I did say 6, Digital I/P's, I2S-e, 110 Ohm AES/EBU (XLR), 75 Ohm SP/DIF (BNC), 75 Ohm SP/DIF (RCA), and no, I did not repeat myself this time, ST Glass Optical, and Toslink Optical.
- Digital I/P transformer isolation on all the wired digital signal inputs, 9 pulse transformers in total.
- As you now know from the DAC-2.5, Crystal Semi-conductor has a new 96K, 24 Bit Digital Audio Input Receiver the SMD CS8414.
- HDCD decoding, and by popular demand, Customer's choice to disable the non-HDCD gain attenuation via a jumper.
- Socketed HDCD PMD-100. A future 96-kHz digital filter solution can be retrofitted, as per availability.
- Dual, 2 Burr Brown PCM1704 24 Bit SMD D/A converters per channel.....
- Yes that means, true balanced circuitry to the Neutrik BALANCED XLR Audio Outputs. Or you have, unbalanced RCA Outputs to choose from.
- Now using light touch Tactile switching for input selection, mute, and for phase selection.
- Automatically, at power up, the DAC3 will scroll to the first active digital input and lock there until you manually select another.
- Lets keep talking high-tech, the digital board and the two, 2 analog boards are four, 4 layered printed circuit boards. You digital gurus know the importance of this advancement!
- A separate power supply printed circuit board to house the three, 3 potted and encapsulated, toroid power transformers, and 21, yes 21, regulated master and slave power supplies.
- Push button Power ON/OFF switch.
- Blue LED power indication. COOOOL BLUE!
- LED's for each of the 6 digital inputs, HDCD, lock, mute, de-emphasis, and for phase. Are you counting? That is 12 Front Panel Display LED's in total!
- A passive analog filter.
- Sanyo Os-Con electrolytic capacitors throughout the digital and analog circuitries.
- AD811 in the I-V position, but it is servo controlled to eliminate any possible DC offset concerns.
- High drive OPA627A and BUF634 O/P stage.

THE ASSEMBLAGE DAC-2.5 24 Bit & HDCD

Available September 1998

24 Bit in a kit!

Audiophiles as well as DIY hobbyists are special - we don't have to wait for the masses. The Parts Connection has it NOW, (or at least in September). AND, this 24 bit DAC resolution kit has HDCD 96KHz 24 Bit decoding to boot!

Design Features:

- Up to 96kHz sampling rate and 24Bit DAC resolution.
- 3 Digital I/P's, 110 Ohm AES/EBU (XLR), 75 Ohm SP/DIF (BNC)*, and Toslink optical. *(BNC to RCA adapter included)
- Digital I/P pulse transformer isolation on the AES/EBU input.
- Crystal Semi-conductor has a new digital audio input receiver the SMD CS8414. It is 96K, 24 Bit capable!
- Socketed HDCD PMD-100. A future 96-kHz digital filter solution can be retrofitted, as per availability.
- Customer's choice to disable the non-HDCD gain attenuation via a jumper.
- Dual Burr Brown PCM1704 24 Bit SMD D/A converters.
- Using light touch Tactile switching for input selection, and for phase selection.
- Blue LED power indication. COOOOL BLUE!
- LED's for each of the 3 digital inputs, HDCD, lock, and for phase.
- Use the latest, OPA134 as a replacement for the AD817 in the output buffer position.
- AD844 in the I-V position.
- Ultra fast, Soft recovery diodes replace the bridge rectifiers.
- Wima power supply bypass caps.
- E.A.R. dampening feet.

...AND just when you thought you had it all, and it can't get any better than this...

UPGRADE KIT PARTS: Caddock resistors, Multicap capacitors, 4 Regulators changed to low impedance Linear Tech devices, Soundcoat for the chassis, , RCA jacks change to the Ultraplate™ KIMBER jacks, Output wires change to KIMBER Silver, OS-Con caps to replace the electrolytic decoupling caps, Analog Devices -

- Ultra fast, Soft recovery diodes replace the bridge rectifiers.
- Big named parts that everyone respects, like Holco, Bourns, Draloric resistors, Wima and Panasonic caps.
- Full sized chassis, like the Assemblage L-1 Preamp.
- E.A.R. dampening feet.

...AND just when you thought you had it all, and it can't get any better than this...

UPGRADE KIT PARTS: Vishay resistors., Multicap capacitors., Soundcoat for the chassis., RCA jacks change to the Ultraplate™ KIMBER jacks., Output wires change to KIMBER Silver.

SKU#	Description	ESTIMATED
		Price \$US
58735	Assemblage DAC-3 Digital Processor Kit 100-240V	\$1499.00
58851	Assemblage DAC-3 Digital Processor Kit 100-120V "Assembled"	\$1549.00
58852	Assemblage DAC-3 Digital Processor Kit 200-240V "Assembled"	\$1549.00
58853	Assemblage DAC-3 Parts Upgrade Kit	\$149.00
58854	Assemblage DAC-3 Kit with Parts Upgrade Kit "Assembled"	\$1799.00

Assembly Time Basic kit: 3 hours

Assembly Time Upgrade kit: 3 hours

Weight: 5.5Kg Chassis Size: 14" x 10" x 3"

PARTS UPGRADE KITS

For those of you who wonder whether your current equipment is sounding as good as it might, we offer a selection of upgrade kits to improve a range of popular audio products. These kits are parts upgrades not circuit design modifications. Upgrade parts are substituted one-for one with the original stock parts. This allows you to keep the classic circuit design of your unit, while taking advantage of the advances in modern material and component technologies. Startling improvements can be had for relatively little cost, and the knowledge and sound improvements to be gained are extremely rewarding. If you have never soldered before or dared to go past the "Do Not Open" labels, consider asking a friend or work colleague to give you a hand -modifying components is fun!

Please note that step-by-step instructions are not provided. All kits come with a list of manufacturer part numbers which are to be replaced "one for one" with those parts provided. We assume that the amateur installer can properly identify the components to be changed and/or modified.

We will develop kits for other popular quality components. If you don't see what you need here give us a call! We have parts upgrade kits for the following components:

Parts Upgrade Kits

SKU#	Description	Price \$US
52666	Audio Research D-76 Parts Upgrade Kit	\$75.00
52667	Audio Research D-76A Parts Upgrade Kit	\$105.00
52668	Audio Research D-150 Parts Upgrade Kit	\$125.00
52672	Audio Research SP-6C Parts Upgrade Kit	\$170.00
52669	Audio Research SP-8 Parts Upgrade Kit	\$125.00
52670	Audio Research SP-9 Parts Upgrade Kit	\$80.00
52671	Audio Research SP-10 Parts Upgrade Kit	\$160.00
52673	Audio Static ES 100 Parts Upgrade Kit	\$250.00
52675	Conrad Johnson MV75 Parts Upgrade Kit	\$65.00
52676	Conrad Johnson Premier 1 Upgrade Kit	\$130.00
52677	Conrad Johnson Premier 2 Upgrade Kit	\$250.00
52678	Conrad Johnson Premier 3 Upgrade Kit	\$120.00
52679	Conrad Johnson Premier 4 Upgrade Kit	\$75.00
52680	Conrad Johnson Premier 5 Upgrade Kit	\$120.00
52681	Conrad Johnson PV5 Upgrade Kit	\$90.00
52683	Dahlquist DQ-10-Basic Version Parts Upgrade Kit	\$95.00

Parts Upgrade Kits (cont.)

SKU#	Description	Price \$US
52684	Dahlquist DQ-10-Deluxe Version Parts Upgrade Kit	\$400.00
52690	Dynaco PAT4 Line Stage Parts Upgrade Kit	\$45.00
52685	Dynaco Stereo 70 Parts Upgrade Kit	\$60.00
52686	Dynaco Stereo 120 Parts Upgrade Kit	\$55.00
52687	Dynaco MKIII Parts Upgrade Kit	\$95.00
52688	Dynaco MKIV Parts Upgrade Kit	\$70.00
52689	Dynaco PAS 2/3X Parts Upgrade Kit	\$135.00
52691	Eminent Technology LFT-III Parts Upgrade Kit	\$70.00
52692	Heathkit W-5M Parts Upgrade Kit	\$80.00
57221	Leak Stereo 20 Parts Upgrade Kit	\$60.00
57222	Leak Stereo 50 Parts Upgrade Kit	\$65.00
58568	Magnepan MG 2.5 Part Upgrade Kit	\$70.00
52693	Magnepan MG III Parts Upgrade Kit	\$65.00
52694	Magnepan MG III A Parts Upgrade Kit	\$130.00
52695	Magnepan MG 3.3R Parts Upgrade Kit	\$115.00
52696	Magnepan Tympany IV A Parts Upgrade Kit	\$75.00
52698	Marantz Model 5 Parts Upgrade Kit	\$80.00
52699	Marantz Model 7 Parts Upgrade Kit	\$70.00
52700	Marantz Model 8B Parts Upgrade Kit	\$75.00
52701	Marantz Model 9 Parts Upgrade Kit	\$95.00
52702	McIntosh C22 Parts Upgrade Kit	\$90.00
52703	McIntosh MC 30 Parts Upgrade Kit	\$100.00
52704	McIntosh MC 60 Parts Upgrade Kit	\$100.00
52705	McIntosh MC 75 Parts Upgrade Kit	\$130.00
52706	McIntosh MC 225 Parts Upgrade Kit	\$100.00
52707	McIntosh MC 240 Parts Upgrade Kit	\$110.00
52708	McIntosh MC 275 Parts Upgrade Kit	\$130.00
57223	Optimus/Genexxa Pro LX-5 Parts Upgrade Kit	\$50.00
52709	Quad II Mono Amp Parts Upgrade Kit	\$40.00
52710	Quad 22 PreAmp Parts Upgrade Kit	\$70.00
52711	Quad ESL 63 Basic Parts Upgrade Kit	\$40.00
52712	Quad ESL 63 Deluxe Parts Upgrade Kit	\$80.00
52713	Quicksilver Mono Amp (8417 & KT88) Parts Upgrade Kit	\$65.00
52714	Spica Angelus Part Upgrade Kit	\$80.00
Poly Natalia Cross OverKits:		
58743	Basic	\$260.00
58744	Delux	\$370.00
58745	Super Delux	\$700.00

DIGITAL COMPONENTS & SEMI CONDUCTORS

DIGITAL COMPONENTS

ULTRA ANALOG AND NPC

75 OHM PULSE TRANSFORMER SPECIFICATIONS

The Parts Connection is pleased to announce that we have been authorized as the exclusive distributor source for the UltraAnalog D20400A DAC modules and the AES 20 Input receiver modules. UltraAnalog DAC and Receiver modules are used in many high end D to A converters and CD players, including models from Aragon, Classé, PS Audio, Mark Levinson, Parasound, Spectral, Sonic Frontiers, Threshold, Manley Labs, and others.

These parts are renowned for their state-of-the-art performance as realized in the majority of high-end DACs, and are now available for the first time to the DIY hobbyist and small O.E.M. We are also carrying the NPC SM5803APT 8x oversampling digital filter* to complete the digital section of your DAC projects as well as a custom 75 ohm pulse transformer for the optimum termination of digital inputs.

All the UltraAnalog modules come with a complete set of application notes and hints to ease the design process. Please note, however, that due to the complexity of digital design, and the time involved, we cannot offer additional technical support for these products. Below we have included the basic description, features and performance of the UltraAnalog modules.

*Please note that due to licensing requirements, the Pacific Microsonics PMD-100 (HDCD filter/decoder chip) is NOT available individually to hobbyists.

SKU#	Description	Price \$U.S.
54764	UltraAnalog D20400A Dual 20 Bit DAC module	\$299.00/ea.
55695	UltraAnalog AES20 Input Receiver module	\$130.00/ea.
54765	UltraAnalog AES21 Input Receiver module	\$130.00/ea.
54819	NPC SM5803APT 8 X Oversampling digital filter	\$29.95/ea.
57188	75 Ohm digital pulse transformer	\$9.95/ea.

Turns Ratio:	1:2
Primary Inductance:	1.6mH (Nom.) 1.0mH Min (at 10 KHz)
Primary Leakage Inductance:	0.5uH Max.
Interwinding Capacitance:	4 pF Max. (Shield grounded)
DC Resistance:	(1,3) 0.3 Ohms Nom. (4,6) 1.0 Ohms Nom.
Primary ET:	150V/uSec Min.
Dielectric Strength:	1600 V
Rise Time (10%-90%):	< 12nSec
Low frequency Cutoff:	< 8Khz

Complete Descriptions for the Ultra Analog products on the following pages.

SEMI CONDUCTORS



ANALOG DEVICES – Op-Amps

SKU#	Description	Price \$US
52913	AD712JN Precision high speed fast settling BiFET Dual Op-Amp	\$5.00 ea.
53221	AD743JN Precision ultra low noise BiFET Op-Amp	\$14.00 ea.
53550	AD744JN Precision fast settling BiFET Op-Amp	\$6.00 ea.
53552	AD797JN Precision ultra low noise and distortion 18V/uS Op-Amp	\$12.50 ea.
55527	AD811AN High speed (2500V/uS) video Op-Amp (Good I/V conv.)	\$12.00 ea.
53222	AD812JN Current feedback low power dual Op-Amp	\$9.50 ea.
55500	AD817AN High speed (350V/uS) low power Op-Amp (Great in DAC-1)	\$6.00 ea.
53546	AD827JN Dual version of AD847	\$16.00 ea.
53548	AD846JN Precision high speed (450V/uS) current f-back Op-Amp	\$9.00 ea.
53549	AD845JN Precision 16 MHz CBFET Op-Amp	\$9.00 ea.
53547	AD847JN High speed (300V/uS) low power Op-Amp	\$8.50 ea.
53587	BUF-03FJ	\$20.00 ea.

OTHER OP-AMPS

SKU#	Description	Price \$US
53564	LF351N BiFET Op-Amp	\$1.75 ea.
53566	LF411CN JFET input low offset Op-Amp	\$2.00 ea.
53567	LF412CN Dual JFET input low offset Op-Amp	\$2.00 ea.



LINEAR TECHNOLOGY – Voltage Regulators

SKU#	Description	Price \$US
53554	LT1085CT Adj. 3.0 A Positive voltage regulator TO-220	\$8.50 ea.
53555	LT1033CT Adj. 3.0 A Negative voltage regulator TO-220	\$7.50 ea.
53172	LT317AT Adj. 1.5 A Positive voltage regulator TO-220	\$4.00 ea.
53170	LT317K Adj. 1.5 A Positive voltage regulator TO-3	\$4.00 ea.
53169	LT337AT Adj. 1.5 A Negative voltage regulator TO-220	\$4.00 ea.

RECTIFIERS

SKU#	Description	Price \$US
53562	IR HEXFRED HFA08TB60 8A 600V TO-220 AC Ultra Fast Soft Rec.	\$7.25 ea.
52868	Motorola MUR120 1A 200V Ultra fast recovery diode DO-41	\$1.25 ea.
52894	Motorola MUR810 8A 100V Ultra fast recovery diode TO-220	\$2.25 ea.
53560	Motorola MUR820 8A 200V Ultra fast recovery diode TO-220	\$2.25 ea.
53561	Motorola MUR860 8A 600V Ultra fast recovery diode TO-220	\$3.25 ea.

ZENERS

SKU#	Description	Price \$US
55046	1N4732 4.7V 1W zener diode	\$0.25 ea.
52845	1N4735A 6.2V 1W zener diode	\$0.25 ea.
53190	1N4744A 15.0V 1W zener diode	\$0.25 ea.
53191	1N4749A 24.0V 1W zener diode	\$0.25 ea.
52844	1N4750A 27.0V 1W zener diode	\$0.25 ea.
55045	1N4751A 30.0V 1W zener diode	\$0.25 ea.
55044	1N4759A 62.0V 1W zener diode	\$0.50 ea.
54506	1N4764A 100.0V 1W zener diode	\$0.65 ea.
52924	1N5352B 15.0V 5W zener diode	\$1.00 ea.
53203	1N5358B 22.0V 5W zener diode	\$1.00 ea.
52923	1N5369B 51.0V 5W zener diode	\$2.00 ea.

DIODES

SKU#	Description	Price \$US
56739	Telefunken SF4007 Superfast soft recovery diode 1A 1000V	\$0.25 ea.
56878	Telefunken SF4002 Superfast soft recovery diode 1A 100V	\$0.15 ea.
53574	TSF12 1A 100V fast recovery diode	\$0.50 ea.
53575	TF155 2A 600V fast recovery diode	\$0.50 ea.

VACUUM TUBES & SOCKETS

VACUUM TUBES

The Parts Connection offers a wide variety of electron vacuum tubes for audio application - more than 240 different types and brands - from current production or from new old stocks. We can also obtain other types from our supply base to meet your specific needs and we welcome your inquiries.



JJ / TESLA



Manufactured by Jamona in Slovakia and formally part of the famous Tesla Electric/Electronics company of Czechoslovakia - Tesla vacuum tubes are demanded by audiophiles worldwide for their quality performance and workmanship.

SKU #	Description	Price \$US
56649	KT88 PAIRS	\$90.00
53259	E34L PAIRS	\$26.00
58846	6L6G PAIRS	\$39.00
54353	ECC83/12AX7 SINGLE	\$10.50
58845	EL84/6BQ5 SINGLE	\$9.50
58633	E88CC Goldpin 1960's SINGLE	\$14.00

SOVTEK TUBES



Sovtek tubes are one of the greatest results of Glasnost, at least to the audio enthusiast! Some of the Sovtek tube types, most notably the 6922, are the best of their type in current production, and possibly the best ever made!

All Sovtek tubes listed here are individually boxed, but NOT selected and tested. Power tubes are matched for transconductance ONLY, and have had a 24 hour pre-conditioning burn-in. Matched quads of power tubes MAY also be available.

Tube Type	SKU#	Singles	Matched Pairs	
		Price \$US	SKU#	Price \$US
12AX7WA/ECC83 (Standard gain)	52474	\$5.75		N/A
12AX7WB/7025 (3dB lower gain, low noise)	52475	\$6.50		N/A
5881/6L6WGC (Small base)	52497	\$8.15	52504	\$25.30
5881WXT (Full size base)	52498	\$8.90	52505	\$26.80
5U4G	52494	\$6.90		N/A
5Y3GT	52495	\$4.25		N/A
6922/E88CC	52491	\$8.50		N/A
6L6GC	52499	\$4.90	52506	\$18.80
6SL7	55971	\$5.00		N/A
6SN7	55972	\$5.10		N/A
6V6 GT (Recommended for lower B+ only)	52500	\$5.65	52507	\$11.50
7199 (O.K. for Dyna, MAY not be optimum in others)	52492	\$11.90		N/A
EL84/6BQ5	52503	\$4.75	52510	\$11.50
EL84M/6BQ5WA (Good for higher B+)	55973	\$8.90	55974	\$23.90
12AX7WXT+	57184	\$4.90		N/A
12AX7WXT+ Select	57183	\$6.90		N/A
300B	56259	\$49.00	57181	\$107.00
EL34WXT	58455	\$8.90		N/A
6550 WE (Metal Ring)	58738	\$16.50		N/A
6B4G (Directly Heated)	58739	\$24.00		N/A
6L6 WXT+ (Super 6L6)	58740	\$10.80		N/A
KT 88	58741	\$20.60		N/A
12AX7WXT	52490	\$6.25		N/A

GOLDEN DRAGON

Golden Dragon

Golden Dragon premium audio tubes begin with the recognition that superb sound quality cannot be merely tested for - it also requires superior design. As with any superior audio component, this includes the design, quality of materials, and the techniques used in its construction.

The Golden Dragon project is headed in England by former employees of Mullard, M-O Valve, and Brimar. Each Golden Dragon tube type goes through many prototype iterations, each of which is evaluated for measured performance AND sonic character. Only when superb sound is achieved does a design become a Dragon. Each power tube design is manufactured solely for Golden Dragon and is covered by an exclusive international contract. Being the first tubes known to be designed with sound quality in mind, it is no surprise that all Golden Dragon tubes share similar qualities, including great openness, speed, coherence, detail, and control.

Superb exclusive design and close contact with major tube factories in China and elsewhere are only the beginning of the Golden Dragon story. All Golden dragon tubes must meet a demanding list of criteria. Each individual power tube is subject to a 36 hour high-voltage test, during which it is monitored for proper characteristics, stability, and match value. Each small signal tube passes a stringent 24 hour test which includes conformance to proper gain, transconductance, low noise, and a microphonics test twice as stringent as the NATO military standard.

Golden Dragon continues to research and design better tubes. The EL34 was revised in 1994 with improved grid and screen materials. Their new 300B, using exotic new materials, is widely regarded as the closest thing available to the original Western Electric. There is also an entirely NEW version of the KT88, which marks the true return of this famous type to high-end audio. There is also a new KT90, not to be confused with the Yugoslavian KT90/99, that is an all new design with the mechanical ruggedness of the Telefunken EL156 but the electrical characteristics of the KT88. It features greatly increased anode area for robust power handling, and is also available with titanium anodes as the KT90LX. Another version with KT66 characteristics is available as the KT66 Super.

Golden Dragon's superior design, materials and construction pays off with tubes of superb linearity, comparable to or superior to many highly regarded N.O.S. types. Golden Dragon tubes are also warranted for 90 days. Try them and see why **Dick Olsher** wrote in Stereophile "The Golden Dragon goal of premium tubes rivaling the best ever made seems to have been realized."

Golden Dragon Small Signal Tubes

Tube Type	Regular		Low Noise		M. Pair		Low Noise M. Pair	
	SKU#	\$US	SKU#	\$US	SKU#	\$US	SKU#	\$US
12AT7A/ECC81	55298	\$18.00	55309	\$28.00	55317	\$46.00	55328	\$70.00
12AU7A/ECC82	55299	\$18.00	55310	\$28.00	55318	\$46.00	55329	\$70.00
12AX7A/ECC83	55300	\$18.00	55311	\$28.00	55319	\$46.00	55330	\$70.00
6DJ8/ECC88	55301	\$25.00	55312	\$40.00	55320	\$72.00	55331	\$102.00
6SN7GT	55306	\$22.00			55325	\$54.00		
EF86 Gold	55308	\$25.00			55327	\$60.00		
Gold Pin								
12AU7A/E82CC-01	55303	\$25.00	55314	\$35.00	55322	\$60.00	55333	\$84.00
12AX7A/E83CC-01	55304	\$25.00	55315	\$35.00	55323	\$60.00	55334	\$84.00
6DJ8/E88CC-01	55305	\$30.00	55316	\$45.00	55324	\$82.00	55335	\$112.00

Golden Dragon Power Pentodes and Tetrodes

Tube Type	Pairs		Quads		Sextets		Octets	
	SKU#	\$US	SKU#	\$US	SKU#	\$US	SKU#	\$US
6BQ5/EL84	55340	\$23.00	55354	\$54.00	55368	\$83.00	55382	\$112.00
7189/E84L	55341	\$30.00	55355	\$68.00	55369	\$104.00	55383	\$140.00
EL34A	55344	\$55.00	55358	\$118.00	55372	\$179.00	55386	\$240.00
6L6GC	55343	\$45.00	55357	\$98.00	55371	\$149.00	55385	\$200.00
5881	55347	\$55.00	55361	\$118.00	55375	\$179.00	55389	\$240.00
6550A	55349	\$95.00	55363	\$198.00	55377	\$299.00	55391	\$400.00
KT66	55348	\$55.00	55362	\$118.00	55376	\$179.00	55390	\$240.00
KT66 Retro	55350	\$150.00	55364	\$308.00	55378	\$464.00	55392	\$620.00
KT88 M	55352	\$150.00	55366	\$308.00	55379	\$464.00	55394	\$620.00
KT90	55351	\$150.00	55365	\$308.00	55380	\$464.00	55393	\$620.00
807	55346	\$68.00	55360	\$144.00	55374	\$218.00	55388	\$292.00

Golden Dragon Power Triodes

Tube Type	Pairs		Quads		Sextets		Octets	
	SKU#	\$US	SKU#	\$US	SKU#	\$US	SKU#	\$US
2A3	55396	\$120.00	55407	\$248.00	55415	\$374.00	55423	\$500.00
211	55398	\$155.00	55409	\$318.00	55417	\$479.00	55425	\$640.00
4300B	55400	\$380.00	55411	\$768.00	55419	\$1154.00	55427	\$1540.00
811A	55402	\$65.00	55413	\$138.00	55421	\$209.00	55429	\$280.00
845	55403	\$193.00	55414	\$394.00	55422	\$5936.00	55430	\$792.00

Golden Dragon Rectifier Tubes

Tube Type	SKU#	\$US
GZ34/5AR4	55405	
5U4G	55406	

VACUUM TUBES & SOCKETS

NEW

WESTERN ELECTRIC

Western Electric

The classic Western Electric 300B returns! This tube is now being produced again in the United States using the original tooling, materials, engineering specifications and production processes. The new WE300B is identical in every way to previous production runs, both in performance and appearance. The tubes will be marked with original Western Electric "flash" logo and will include manufacturing date codes. Packaging will be the traditional Western Electric style box.

Western Electric

SKU#	Description	Price \$US
58533	Western Electric 300B tube pairs	\$900.00/pr
55975	Western Electric 300B tube	\$400.00/ea

NEW

VALVE ART

VALVE ART

Here's an interesting variation on the 300B directly heated triode. The crafty people at Audio Art have taken the standard 300B directly heated triode, and instead of using the usual stamped metal anode, they have machined the anode out of graphite. What does this mean? More power! The 300B-C60 is capable of dissipating up to 80 watts, 40 watts more than the standard 300B. Other benefits of this type of construction include: reduced temperature of the anode and glass envelope, low thermal expansion of the anode - less geometric distortion as the tube heats up, graphite material has the characteristics of getting residual gas, coefficient of secondary electron emission of graphite material is much lower - reducing the number of stray electrons - and thus lower noise, and graphite is non magnetic - thus lowering its susceptibility to magnetic field leakage from nearby transformers.

Valve Art 300B - Matched Pair

SKU#	Description	Price \$US
58635	300B C60 Valve Art pairs	\$199.00

NEW

Ei - YUGOSLAVIA



The tubes from the Ei factory, located in the eastern baltic state of Yugoslavia, have become world-renowned for their unique and robust 6550/KT88 replacement - the KT90 - a tube which has continued to evolve over several design revisions. However, of late, they have also garnered quite a reputation for their dual triodes as well. Many tube-o-philes feel that their "Telefunken-like" construction impart an unsurpassed level of musicality for a modern tube design. Priced competitively with their Russian and Chinese counterparts, this complete line of tubes boasts excellent internal construction, rugged durability and excellent sonics.

Ei Yugoslavia

SKU#	Description	Price US
58835	6BL8/ECF80	\$3.90
58836	6BM8/ECL82	\$4.90
58837	6CA7 "BIG BULB"	\$11.50
58838	6CG7/6F87	\$6.50
58839	6DJ8/ECC88	\$3.95
53260	12AT7/ECC81	\$4.90
58840	12AU7/ECC82	\$4.70
57569	12AX7/ECC83	\$4.50
57571	12BH7	\$7.90
58841	12DW7/7247	\$7.90
58854	EL34	\$7.70
58855	EL619/6KG6	\$11.90
58856	EL84/6BQ5	\$5.90
57570	KT90	\$28.50
57111	PCL805	\$5.00
58867	PL519/40KG6	\$11.90

NEW

AVVT

The AVVT line of vacuum tubes is the latest offering from the talented tube designer, Mr. Alesa Vaic. Yes, that Vaic. Now under the auspices of his OWN company, AVVT (Alesa Vaic Vacuum Technology), a new line of directly heated triodes is now available, possessing all those hallmarks that Mr. Vaic's tube designs are famous for: Higher power output, excellent reliability, long operating life, and last but not least, AWESOME sonic qualities. For those of you who have tried the "standard" varieties of 300B tubes, you really owe it to yourself to give the AV300B-SL a try. You'll be amazed at the extra dynamics and sense of scale that Mr. Vaic's tubes will impart to your music.

AVVT Tubes - Matched Pairs

SKU#	Description	Price US
58572	AV 300B - SL "Audio Note" 45W	\$390.00
58573	AV 302B - SL AVVT	\$470.00
58574	AV 350B - SL AVVT	\$800.00
58575	AV 520B - SL AVVT	\$960.00
58576	AV 325B - SL AVVT	\$580.00
58577	AV 320B - SL AVVT	\$680.00
58578	AV 550B - SL AVVT	\$1080.00

SVETLANA



Another great result of Glasnost, Svetlana Electron Devices is the pipeline for a number of Russian vacuum tube factories to the west. Svetlana's brand of tested and matched tubes, and have introduced many excellent new tube types including the new 6550C, a new EL-34 designed after the Mullard, a new 6L6 designed after the Sylvania 6L6GC "STR" and the exciting new SV-811 and SV-572 power triodes. Reliability of the Svetlana tubes has been excellent, and all tube types come with a 90 day full replacement warranty. Svetlana matched pairs of power tubes are matched for plate current.

Tube Type	Singles	Matched Pairs		
	SKU#	Price \$US	SKU#	Price \$US
SV6550C	56296	\$25.00	56464	\$60.00
EL34	55992	\$20.00	55993	\$48.00
SV6L6GC	56976	\$18.00	56977	\$48.00
EL509	56978	\$41.00		N/A
SV811-3 (1)	55995	\$41.00		N/A
SV811-10 (1)	55996	\$35.00		N/A
SV572-3	56979	\$70.00		N/A
SV572-10	56980	\$70.00		N/A
SV572-30	56981	\$70.00		N/A
SV572-160	56982	\$70.00		N/A
EF86/6267	56003	\$11.00		N/A
6BM8	55997	\$10.00		N/A
6AS7G/6N13S	55998	\$16.00		N/A
811A (1)	55999	\$27.00		N/A
300B	57973	\$150.00		N/A
6N1P	58439	\$5.00		N/A

(1) SV811-3, SV811-10, 811A have a one year/1000 hr. pro-rated warranty.

NOS Tubes - "New Old Stock"

SKU#	Product code	A.K.A	Description	Country	Brand	Price \$US
570290A2WA	CV4020		Rectifier - Glow Discharge.	U.K.	Thompson	\$5.00
570300A2WA			Gas reference tube / Bulk Pack	U.S.A.	GE-	\$5.00
57116 OA3	VR75		Rectifier	Germany	Ultron-	\$5.00
57117 JAN 0A3	VR75		Rectifier	U.S.A.	RCA-	\$5.00
57118 JHY 0B2	6627		Rectifier	U.S.A.	Columbia	\$10.00
57119 JAN OC3W	VR105W		Rectifier	U.S.A.	Sylvania-	\$10.00
57137 2GK5	2F05A		Hi Mu Triode	Germany	Ultron-	\$10.00
570455R4GY	2076		Dual Rectifier	U.K.	Pinncale-	\$10.00
52633 5R4GY	2076		Dual Rectifier	U.K.	Zaerix-	\$17.50
52634 JAN 5R4GYB	2076		Dual Rectifier	U.S.A.	Raytheon-	\$17.50
57048 5Y3	5AU4		Dual Rectifier	Russia		\$6.00
561495Y3GT			Dual Rectifier	U.S.A.	-	\$8.10
57049 5Y3GT			Dual Rectifier	Germany	Ultron	\$10.00
57000 5Z4GT			Dual Rectifier	Russia	-	\$4.50
56152 6AN8			Triode/Pentode	U.S.A.		\$7.20
57050 6AU6	6AG5		Pentode	U.S.A.	United, '83	\$6.00
57051 6AU6A	EF94		Pentode	U.S.A.	RCA-	\$6.00
52524 6AU6A	EF94		Pentode	U.S.A.	United, '82	\$7.00
52525 6AU6WC			Sharp Cutoff Pentode	U.S.A.	Sylvania	\$5.40
57053 JAN 6AU6WC			Sharp Cutoff Pentode	U.S.A.	Sylvania	\$4.00
53150 6AU6WB	6136		Sharp Cutoff Pentode	U.S.A.	National	\$5.40
52526 6AU8A	2081		Triode/Pentode	U.S.A.	Sylvania	\$10.00
56159 6BL8			Dual Triode	U.S.A.		\$6.30
56133 6BM8			Triode/Pentode	U.S.A.		\$7.20
56153 6BX7GT			Dual Triode	U.S.A.		\$13.50
56208 JAN 6BX7GT			Dual Triode	U.S.A.	GE	\$13.00
57054 6C4	EC90		Medium Mu Triode	U.K.	Edicron	\$8.50
57055 JAN 6CG7	6FQ7		Dual Triode	U.S.A.	Sylvania	\$35.00
57002 6CG7	6FQ7		Dual Triode, Rare, RSD box	Germany	RSD	\$10.00
52546 6CG8A			Triode/Pentode - Ultron Box	Germany	Ultron	\$9.00
56131 6DL4			Triode	U.S.A.		\$8.10
54354 6DS4	6CW4		Nuvistor - GE box	U.S.A.	GE	\$18.00
57003 6EA7	6EM7		Dual Triode	U.S.A.	Sylvania	\$12.00
57058 6EM7	6EA7		Dual Triode	U.K.	Zaerix	\$6.00
57056 6EM7	6EA7		Dual Triode	Germany	Ultron	\$12.00
52547 6EM7	6EA7		Dual Triode	Germany	RSD	\$10.80
57059 6EM7	6EA7		Dual Triode	U.S.A.	Westinghouse	\$10.80
57121 6FS5	6FG5		Beam Hexode	U.S.A.	Sylvania	\$10.00
56137 6GU7			Dual Triode	U.S.A.		\$4.50
56132 6JC8A			Triode/Pentode	U.S.A.		\$6.75
57031 6J5WGT	6L5G		Medium Mu Triode	U.S.A.	Sylvania	\$7.65
56135 6LU8			Triode/Pentode	U.S.A.		\$9.00
56151 6LW6			Beam Power Pentode	U.S.A.		\$22.50
56130 6N7			Triode	U.S.A.		\$8.10
57060 6N7M			Dual Triode			\$15.00
57032 6SA7	6SB7		Penta Grid Convertor	U.S.A.	Ken - Rad	\$10.00
57061 6SA7GT	6SB7Y		Heptode	U.S.A.	RCA	\$5.00
57063 6SA7	6SB7Y		Heptode	Germany	Ultron	\$5.00
57062 6SA7GT5	6SB7Y		Heptode	Germany	RSD	\$5.00
52550 6SL7GT			Dual Triode	Russia		\$5.40
57140 6SN7GTB			Dual Triode	U.S.A.	Marconi	\$12.50
57142 6SN7GTB			Dual Triode	U.S.A.	Stewart-Warner	\$12.50
57037 6V6GT	CV511		Beam Power Tetrode	Russia		\$5.00
57133 6V6GTY	CV511		Beam Power Triode	U.K.	STC	\$15.00
56129 6X4	EZ90		Dual Rectifier	U.S.A.		\$5.40
57107 6X4	EZ90		Dual Rectifier	Holland	Philips	\$9.00
57016 6X5GT/GTY	CV-574		F.W. Dual Rectifier - Octal 6X4 - To Mil Spec's	U.K.	'65-'72	\$6.00
57007 6X5GT	EZ35		Dual Rectifier	U.K.	Teonex	\$5.00
52555 6Z7G			Dual Triode	U.S.A.	RCA	\$9.00
56144 12AT7A	ECC81		Dual Triode	U.S.A.	GE	\$13.50
56209 JAN 12AT7WC	ECC81		Dual Triode - Mil Spec	U.S.A.	Philips ECG	\$9.00
58902 12AU7WA	ECC82		Dual Triode - orig gr logo, govt box France	RTC, '65		\$12.00
56124 12BY7A			Dual Triode	U.S.A.		\$15.75
57069 12BY7A			Hi Mu Dual Triode	U.S.A.	Sylvania	\$30.00
57070 12FQ7			Dual Triode	Germany	Ultron	\$12.00
52557 12FQ7			Dual Triode	Germany	RSD	\$8.00
52558 12FQ7			Dual Triode	U.S.A.	Dumont/GE	\$8.00
56160 12SN7			Dual Triode	U.S.A.		\$5.40

NOS TUBES - "NEW OLD STOCK"



New! Now Discountable!
Now available with discounts up to 30%

The Parts Connection has stocks, some in very limited quantities, of vacuum tubes manufactured by the tube industry leaders of the 1940's, 50's, 60's, 70's and 80's - brands such as Mullard, Siemens, Philips, GE, Westinghouse, RCA and STC. These tubes are new and many are in their original packages. Some stocks were made specifically to exacting military specifications and are so identified. NOS tubes are warranted only to be free from defects in workmanship or materials for 90 days from date of shipment. There are no other warranties, either expressed or implied which extend to the foregoing, and there are no warranties of merchantability or fitness for any particular purpose.

VACUUM TUBES & SOCKETS

SKU#	Product code	A.K.A	Description	Country	Brand	Price \$US	SKU#	Product code	A.K.A	Description	Country	Brand	Price \$US
56122 40KG6A	PL509		"Beam Power Tetrode - singles"	USA		\$16.00	56144ECC81	12AT7A	Dual Triode	U.S.A.	GE	\$13.50	
5263185A2	OG3/5651A	Glow Discharge	Tube-B+ Regulator	U.K.	Mullard	\$6.00	56209 ECC81	JAN12AT7WC	Dual Triode - Mil Spec	U.S.A.	Philips ECG	\$9.00	
57263203WA			Power Triode - orig. Army Box	USA	United, '54	\$125.00	58902ECC82	12AU7WA	Dual Triode, orig gr logo, Govt Box	France	RTC, '65	\$12.00	
57071211	VT-4C		"Power Triode - White Gov. Box"	U.S.A.	Taylor, '40s	\$120.00	52573ECC83	12AX7A	Dual Triode, Gold Dragon Type	China	Shuguang, '92\$4.50		
57072211	VT-4C		Power Triode	U.S.A.	Westinghouse	\$120.00	57023ECC83	12AX7A	Dual Triode	Hungary	Tungsram	\$10.00	
					'40s		57024ECC84	6CW7	Dual Triode	Germany	RSD	\$10.00	
57073211	VT-4C		Power Triode - Blank box	U.S.A.	United, '40s	\$120.00	52577ECC85	6AQ8	Dual Triode - Tungsram Box	Hungary	Tungsram	\$6.75	
52520311A		Receiving Pentode	USA	-		\$41.00	57025ECC88	6DJ8	Dual Triode, Old Logo, White Box	U.K.	Mullard	\$18.00	
57123866A	3B28	Dual Rectifier	Germany	RSD		\$35.00	57026ECC88	6DJ8	Dual Triode	U.K.	Amperex	\$22.50	
57009 JAN 1619		R.F. Pentode To Military Specs	U.S.A.	RCA, '52/53	\$10.00	52588ECC88	6DJ8	Dual Triode - white box	Czech	Tesla	\$11.25		
57074 JAN	C6K	Power Triode	U.S.A.	Westinghouse	\$10.00	57129ECC88	6DJ8	Dual Triode - "BULK pack"	Czech	Tesla	\$6.75		
	CWL5685						52584ECC88	6DJ8	Dual Triode, Old Logo, White Box	Holland	Mullard	\$15.75	
57076 5876		Hi Mu Triode (pencil)	U.S.A.	RCA		\$10.00	52585ECC88	6DJ8	Dual Triode In Valvo-Hamburg Box	Germany	Valvo, '62/63	\$22.50	
57077 JAN	6AS7G	Low Mu Dual Triode	U.S.A.	Tungsol		\$15.00	57096ECC88	6DJ8	Dual Triode	U.K.	Philips	\$15.75	
	CTL6082WB						52589ECC88	6DJ8	Dual Triode	Yugo	National	\$3.60	
53269 JAN 6189WA		Dual Triode - white box	US/CA	GE/Syl/RCA/ Philips		\$13.50	57101ECC189	6ES8	Dual Triode	U.K.	Noval	\$6.00	
57011 6414	12AV7	Dual Triode	U.S.A.	Raytheon		\$7.00	57102ECC189	6ES8	Dual Triode	Holland	Philips	\$6.00	
53686 6528A		Dual Power Triode - white Richardson box	U.S.A.	Cetron		\$25.00	57099ECC189	6ES8	Dual Triode	Germany	Europa	\$6.00	
570336686	E8IL	Pentode	U.S.A.	RCA		\$17.50	57014EF-37A	CV-358	Pentode w/ cap - Made by STC, To Military Specifications	U.K.	ITT	\$6.00	
57080 JAN 7308	E188CC	Medium Mu Dual Triode - Some with JAN (Joint Army-Navy) designation	U.S.A.	Sylvania		\$20.00	57124ECH84	6JX8	Triode Heptode	U.K.	Edicron	\$15.00	
		- (most in government boxes)					57135EL86			U.K.	Mullard	\$17.00	
570127308	E188CC	Medium Mu Dual Triode	Holland	Westinghouse		\$30.00	57125EM80	6BR5	Indicator	Germany	Valvo	\$15.00	
571157308	E188CC	Medium Mu Dual Triode	U.S.A.	Sylvania		\$30.00	52628GZ-37	CV-378	5V Dual Rectifier w/ slow turn on. Built to Mil Spec, Great 5AR4/GZ34 sub.	U.K.	Mullard, '67	\$15.00	
526037308	E188CC	Medium Mu Dual Triode - *Marked Sylvania and Philips - "ECC"	U.S.A.	Sylvania/ Philips		\$20.00	57283 KT88-US		Beam Power Pentode - Made in U.S.A. at Richardson's "Cetron" Factory to MO-Valve Spec's Electrically Equivalent to the original MO-valve/GEC tube	U.S.A.	National	\$95.00	
570817581A	KT-66	Beam Power Amplifier	U.S.A.	GE		\$25.00							
57014CV358	EF-37A	Pentode w/cap	U.K.	ITT		\$6.00							
		Made by STC - to military specifications											
52628CV378	GZ-37	5 volt Dual Rectifier	U.K.	Mullard, '67		\$15.00							
		slow turn on - To Military Spec's - Grt. 5AR4/GZ34 sub!											
57107EZ90	6X4	Dual Rectifier	Holland	Philips		\$9.00	57018M8136	CV-4003	A super 12AU7 to Mil Spec's	U.K.	Mullard	\$20.00	
57015CV428	5B-254M	with anode cap - Made by STC	U.K.	ITT, '81/82		\$10.80	52609PCC88	7DJ8	Dual Triode - Ediswan Box	U.K.	Ediswan	\$5.40	
		- To Mil Spec's - Convert to 807					52607PCC88	7DJ8	Dual Triode - RFT Box, singles	Germany	RFT	\$6.30	
57133CV511	6V6GTY	Beam Power Tetrode	U.K.	STC		\$15.00	52608PCC88	7DJ8	Dual Triode	Germany	Valvo	\$8.00	
57016CV574	6X5GT/GTYF.W.	Dual Rectifier - Octal 6X4	U.K.	STC, '65-72		\$6.00	52611PCC189	7ES8	Dual Triode, Ultron Box, some SO	Germany	Ultron	\$6.30	
57134CV1985	7231		U.K.	STC		\$13.00	52617PCL85		Triode Pentode - Tungsram box	Hungary	Tungsram	\$1.75	
57083CV2253	6574		U.K.	Mullard		\$10.00	52616PCL86	14GW8	Triode Pentode - diamond mark	Germany	Telefunken	\$2.75	
57084CV3998	E180F	R.F. Pentode, Mil Spec, Gold Pins	U.K.	Mullard		\$7.00	52615PCL86	14GW8	Triode Pentode	Germany	Philips	\$2.70	
57018CV4003	M8136	A 'super' 12AU7 to Military Spec	U.K.	Mullard		\$20.00	52613PCL805	18GV8	Triode Pentode - Siemens box	Germany	Siemens	\$4.05	
57034CV4020	OA2WA	150V Gas Regulator, To Mil Spec	U.K.	EEV		\$10.00	57112PCL805	18GV8	Triode Pentode	Hungary	Tungsram	\$5.00	
52568CV4024	ECC81/ 12AT7WA	Dual Triode, Mil Spec	U.K.	Mullard		\$15.75	57113PF86	4HR8	Pentode	Germany	Ultron	\$5.00	
57086CV8431	E180CC/ 7062	Dual Triode, Mil Spec's	Holland	Mullard, '76		\$12.00	57126VT200	JAN OC3/ VR105	Diode	U.S.A.	Sylvania	\$10.00	
							57127VT200	JAN OC3/ VR105	Diode	U.S.A.	RCA	\$10.00	
57089E80CC	6085	Dual Triode	Germany	Ultron		\$12.00	57128VT200	JAN OC3/ VR105	Diode	U.S.A.	Hytron	\$10.00	
57090E80CC	6085	Dual Triode	Germany	Valvo		\$12.00	57114VT232	E1148	Transmitting Triode Anode Cap and Cathode Cap	U.S.A.	Philco	\$12.00	
57087E80CC	CV5989	Dual Triode	U.K.	Brimar		\$12.00	57109VT232	E1148	Transmitting Triode Anode Cap and Cathode Cap	U.S.A.	Raytheon	\$12.00	
57091E80CC	6085	Dual Triode	U.K.	Mullard		\$12.00	56657VU-39	MUI4/ 6BT4	Bi-Phase H.W. Rectifier - Military Spec's RAF type (GBTA)	U.K.	Brimar, '42	\$10.00	
57088E80CC	6085	Dual Triode	U.K.	Chelmer		\$12.00	56656VU-39	MUI4/ 6BT4	Bi-Phase H.W. Rectifier - "Mil Spec's - Equivalent to IW4-400, 1861"	U.S.A.	Ken-Rad, '42	\$10.00	
57038E88CC	6922	Medium Mu Dual Triode	U.K.	Brimar		\$17.00							
57092E88CC	6922	Medium Mu Dual Triode	U.K.	Philips		\$25.00							
52591E88CC	6922	Medium Mu Dual Triode	Holland	Mullard		\$22.50							
		Gold pins, Modern Logo, Original Box											
58634 E88CC	6922	Medium Mu Dual Triode	USA	Amperex		\$16.50							
52595 JAN E88CC	6922	Medium Mu Triode	Germany	Siemens, '62		\$30.00							
		Siemens-Halske, Mil Spec - Original Box"	Halske										
57022E180CC/ 7026	CV8431	Dual Triode, Mil Spec's	U.K.	Mullard, '76		\$12.00							
57017E180F	CV3998	R.F. Pentode Mil Spec's, Gold pins	U.K.	Mullard		\$7.00							
57093E180F	6688/ CV3998	R.F. Pentode	Russia			\$9.00							
52603E188CC	7308	Medium Mu Dual Triode	U.S.A.	Sylv/Philips		\$20.00	56771B9D		PCB mount socket	U.K.		\$3.50	
57093E188CC	7308	Medium Mu Dual Triode	Holland	Westinghouse		\$30.00	56773 4 Pin Jumbo		Socket	U.K.	Ediswan	\$25.00	
52548ECC40	6N7	Small 8 pin Triode - RARE!	Hungary	Tungsram		\$15.75	55795 805 Top Cap		Anode Cap -Ceramic	China		\$4.50	
							57008 807 Top Cap		Anode Top Cap' for 807 - Ceramic			\$4.50	

New Old Stock Tube Sockets

SKU#	Product code	Description	Country	Brand	Price \$US
56769 B9A		55mm Screening Can Socket	Germany		\$3.50
56770B7G		Socket with rubber ring flange - vibration service	U.K.		\$1.50
56771B9D		PCB mount socket	U.K.		\$3.50
56773 4 Pin Jumbo		Socket	U.K.	Ediswan	\$25.00
55795 805 Top Cap		Anode Cap -Ceramic	China		\$4.50
57008 807 Top Cap		Anode Top Cap' for 807 - Ceramic			\$4.50

9 PIN MINIATURE

Product Description	Silver Plated Contacts		Gold Plated Contacts	
	SKU#	Price \$ US	SKU#	Price \$ US
Chassis Mount (with solder lugs)				
Ceramic, cup style contacts, 2 piece, top mount	55293	1.25 ea.	59000	2.00 ea
Plastic, cup style contacts, with shielded socket	59001	1.50 ea.	59002	2.50 ea.
Plastic (Brown) cup style contacts	59003	1.00 ea.	N/A	
Shield (Aluminum) for 9 Pin socket	59004	1.20 ea.	N/A	
PCB Mount	SKU#	Price \$ US	SKU#	Price \$ US
Ceramic, cup style contacts, 2 piece	52640	1.25 ea.	55292	2.00 ea.
Ceramic, cup style contacts, 1 piece with shoulder	59005	1.25 ea.	59006	2.00 ea.
Ceramic, cup style contacts, 1 piece, straight	59007	0.75 ea.	59008	1.50 ea.
Plastic (brown), cup style contacts.	55800	1.00 ea.	N/A	

8 PIN OCTAL

Product Description	Silver Plated Contacts		Gold Plated Contacts	
	SKU#	Price \$ US	SKU#	Price \$ US
Chassis Mount (with solder lugs)				
Ceramic, cup style contacts, with bottom mount bracket	55297	1.75 ea.	59009	3.00 ea.
Ceramic, fork style contacts, with bottom mount bracket	55112	1.75 ea.	59010	3.00 ea.
Ceramic, cup style contacts, with top mount bracket	59011	2.00 ea.	59012	3.50 ea.
Plastic (brown), fork style contacts, with integral mounting bracket	59013	1.75 ea.	N/A	
PCB Mount	SKU#	Price \$ US	SKU#	Price \$ US
Plastic(brown), fork style contacts, with integral mounting bracket	54795	1.75 ea.	N/A	
Ceramic, cup style contacts	55291	1.50 ea.	59015	2.50 ea.
Ceramic, fork style contacts	59016	1.50 ea.	59017	2.50 ea.

OTHER - LARGE

Silver Plated Contacts	Gold Plated Contacts	
Product Description	SKU#	Price \$ US
9 Pin Novar, black plastic, chassis bottom mount	55295	4.50 ea.
9 Pin Novar, brown phenolic, pcb mount	55296	5.50 ea.
7 Pin ceramic, wafer type socket for 6C33C-B tube type	59026	4.00 ea.
5 Pin ceramic, wafer type socket for 807 tube type	59024	3.00 ea.
4 Pin - JUMBO, Ceramic, locking type socket (211/845/805)	59022	8.00 ea.
4 Pin - Small, ceramic, locking type socket (300B/2A3/811)	55521	5.50 ea.
4 Pin - Small, ceramic, wafer type, (300B/2A3/811)	55119	3.00 ea.

VACUUM TUBES & SOCKETS

OTHER - SMALL

Product Description	Silver Plated Contacts		Gold Plated Contacts	
	SKU#	Price \$ US	SKU#	Price \$ US
7 Pin - ceramic, PCB mount, 2 piece	59028	1.25 ea.	59029	2.00 ea.
7 Pin - ceramic, Chassis 'top' mount, 2 piece	59030	1.25 ea.	59031	2.00 ea.
7 Pin - plastic (black), PCB mount, Cinch -Jones type	54963	1.00 ea.	N/A	

ANODE TOP CAPS

Product Description	Silver Plated Contacts		Gold Plated Contacts	
	SKU#	Price \$ US	SKU#	Price \$ US
For 807/6146B tube types, ceramic	57008	1.25 ea.	59020	2.00 ea.
For 572/805/811/813 tube types, ceramic	55795	1.50 ea.	59021	2.50 ea.

TRANSFORMERS

NEW

ASSEMBLAGE CUSTOM TRANSFORMERS

The following three transformers are custom made units not available elsewhere. These transformers are manufactured by Hammond Manufacturing, in consultation with Sonic Frontiers/The Parts Connection design staff. Whether these transformers are used in your own design, or in Assemblage kits, they deliver world class performance at real world prices.

Assemblage ST-40 Output Transformer

ASSEMBLAGE

The Assemblage ST-40 Output Transformer was custom designed by Hammond Manufacturing, in consultation with the Sonic Frontiers technical design staff, for The Parts Connection. Using high quality M-6 steel for the laminations, these output transformers have a primary impedance of 4300 . With ultra linear screen taps, this transformer is easily capable of producing 50 watts of output from a pair of EL34 tubes, with low distortion. This output transformer has 4, 8, and 16 taps, allowing it to work effectively with a large variety of speaker types. This transformer uses lug type terminators, allowing you to use the hook-up wire of your choice.

SKU#	Dimensions	Weight	Price \$US
57651	lamination stack - 1.5"H x 3.125"W 3.75"L total height with bell cover and windings - approx. 2.5" 2.5" x 3.0" mounting centers (suggested) 3.0" x 3.2" cut-out for mounting) With bell cover on top surface.	(2.25 Kg)	\$79.95

Assemblage ST-40 Power Transformer

ASSEMBLAGE

The Assemblage ST-40 Power Transformer has been custom designed by Hammond for use in the new line of Parts Connection kits. This power transformer is heavy duty! Primary windings can be configurable for 120V or 240V operation. The secondary windings are rated:

Red - Red/Yellow - Red: 760VCT, @ 350mA
Red/Yellow - Orange: 65V Bias Tap
Green - Green: 6.3V @ 7A Filament Tap

Comes with flying leads.

SKU#	Dimensions	Weight	Price \$US
57650	lamination stack - 2.5"H x 3.75"W x 4.5)L total height with bell cover and windings - approx. 4.75" 3.0" x 3.75" mounting centers (suggested) 2.1" x 2.6" cut-out for mounting) With bell cover on top surface	(5.25Kg)	\$89.95

Assemblage L-1 Power Transformer

ASSEMBLAGE

The Assemblage L-1 Power Transformers can be used as a general purpose tube preamp transformer. With a very conservatively rated output, this transformer can deliver: 275V @ 40mA and 11V @ 400mA

The 11V filament supply was designed with a regulated filament supply in mind. As the transformer is mounted on 3/4" standoffs, and has a low 2.5" profile, it can be mounted easily into any chassis. Bell covers on both top and bottom surfaces greatly reduce stray magnetic fields, helping to ensure low noise operation. This transformer has a very flexible primary configuration schemes, allowing the transformer to operate on 100V, 120V, 220V or 240V AC mains supply. Comes with flying leads.

SKU#	Dimensions	Weight	Price \$US
57672	lamination stack - 0.875"H x 2.2"W x 2.625)L height of lamination stack and standoffs - 1.7"H. Total height with bell and standoff - 2.5"H. 1.75" (approx.) x 2.1875" mounting centers With bell cover on top and bottom surfaces.	(0.70Kg)	\$34.95

PLITRON TRANSFORMERS



Toroidal transformers offer significant advantages in audio power supply circuits due to smaller size and weight as well as greatly improved efficiency and quiet operation. But until now they have not been successfully implemented in tube output applications.

Plitron, in conjunction with Menno Vanderveen in The Netherlands, have taken toroidal advantages and applied them in a scientific manner to produce output transformers of the highest quality. This radical new design concept was presented in a paper entitled "Theory and Practice of Wide Bandwidth Toroidal Output Transformers," at the 97th AES Conference.

The performance demands placed on output transformers are complex. The transformer must deliver adequate power without core saturation, provide wide frequency bandwidth, and consistent behavior in the time domain. Menno Vanderveen developed this series using modern measuring equipment like MELISSA, supported by CAD, CAI (Computer Aided Implementation), Time-Frequency Analysis and modeling with FOURIER Synthesizing. PAT series transformers provide outstanding performance in all these areas, to retain the open, spacious qualities of recorded music. The sound quality of PAT transformers is exceptional: low distortion, and extremely wide frequency range.

The PAT series uses proprietary interleaved winding techniques with state-of-the-art winding equipment to produce high inductance on the primary winding, and extremely low leakage inductance. The result is the creation of a series of transformers with an extraordinarily high Quality Factor. The special winding techniques allow the transformers to exhibit low magnetic losses and low internal capacitances.

The transformers behave completely as a single second order low-pass filter with exactly defined poles.

Consequently the NFB-network can be simplified and in most cases frequency limitation networks can be removed from the amplifier signal path.

Instructions to implement Plitron PAT series transformers in existing amplifiers are provided with each unit. The four simple steps include instructions on balancing the DC-currents through the power-tubes. The result of upgrading existing amplifiers will be to extend the frequency range beyond 100 kHz without overall negative feedback, and to optimize for the lowest possible THD.

Quality Factor

"... 'Quality Factor' is the ratio of inductance to leakage inductance...the 20-20 series (from Peerless) was 100,000...an absolutely amazing stat. Frank McIntosh in his patent application for his unity-coupled transformer proudly stated that his design was notable for achieving a quality factor of 75,000. To put it in context, the calculated quality factor of our loyal friend, the original ST-70 transformer (from Dynaco) would be only 20,313." From The Core Issues: Understanding Output Transformers by Michael S. Lefevre of MagneQuest in Sound Practices Vol. 1 Issue 2, Fall 1992.

The PAT series transformers have Quality Factors from 144,000 to 274,000. The extremely high quality factor allows these transformers to be used over a very wide range of input and output impedances. It is also the key to this series' unparalleled bandwidth.

Plitron Complementary Power Transformers

SKU #	55810	55809	55808	55807
Model #	454707	654708	754709	854710
Power (VA)	100	220	284	357
Input	100, 120, 200, 220, 240			
VAC 50/60Hz O/P, Vh	290V 0.25A	290V 0.6A	340V 0.7A	340V 0.8A
O/P, filament	6.3V 3.8A	6.3V 6.8A	6.3V 6.8A	6.3V 12.8A
O/P, NGV, Bias	40V 0.1A	40V 0.1A	40V 0.1A	50V 0.1A
Dim A (mm)	65.3	65.7	82.8	100.3
Dim B (mm)	125.6	139.6	151.2	154.4
Dim C (mm)	6.1	8.2	8.2	10.4
Dim D (mm)	5.8	8	7.9	9.2
Dim E (mm)	10	13	13	16
Dim F (mm)	6.1	8.2	8.2	10.4
Dim G (mm)	45	50	55	55
Weight (kg)	2.59	3.19	4.15	6.1
Price \$US	\$118.00	\$146.00	\$169.00	\$189.00

Plitron Output Transformers

SKU #	55813	55812	55811	55806
Model #	PAT4002	PAT4004	PAT4006	PAT4008
Nominal Power	40W	70W	100W	80W Triode
RMS (note 1)				
Primary Impedance (Raa)	5878	2756	1885	1239
Primary Current (IDC), maximum	117mA	225mA	326mA	359mA
Secondary Load Impedance, nominal (Rls)	5	5	5	5
Turns Ratio (Np:Ns)	34.28: 1	23.48: 1	19.42: 1	15.74: 1
Ultra Linear Tap	40%	40%	40%	40
Frequency Range, Flat (note 3)	3.9Hz to 24kHz	1.8Hz to 63.7kHz	1.4Hz to 96.5kHz	1.3Hz to 104.5kHz
Frequency Range, -1dB (note 3)	1.7Hz to 53.5kHz	0.8Hz to 120.6kHz	0.6Hz to 152.2kHz	0.5Hz to 173kHz
Frequency Range, -3dB (note 3)	0.8Hz to 98.8kHz	0.4Hz to 187.4kHz	0.3Hz to 217kHz	0.3Hz to 251.5kHz
Power Bandwidth Start, -3dB	25Hz	22.7Hz	20.7Hz	20.5Hz
Total Primary Inductance (Lp) (note 2)	535H	490H	530H	360H
Leakage Inductance, Pri to Sec (Lsp)	3.7mH	2.6mH	1.8mH	1.312mH
Effective Primary Capacitance (Cip)	0.613nF	0.558nF	0.585nF	0.593nF
Total Primary Resistance (Rip)	68.1	173.7	104	37.8
Total Secondary Resistance (Ris)	0.158	0.168	0.18	0.16
Q-factor 2nd Order HF Roll-off	0.5	0.64	0.7	0.68
Quality Factor (Lp/Lsp)	144,610	188,510	294,410	274,410
Frequency Decade Factor (FDF) (note 4)	5.07	5.67	5.85	5.96
Size, diameter x height (mm)	125.6 x 65.3	125.6 x 65.3	125.6 x 65.3	125.6 x 65.3
Weight (kg)	2.4	2.4	2.6	2.6
Price \$US	\$153.00	\$159.00	\$153.00	\$131.00

Notes: 1. Measured and calculated with balanced DC current and AC anode voltage in the circuit power tubes.

2. 240V 60Hz across primary winding.

3. Measured at 1mW in Ris: Ri and Ris are resistive loads.

4. FDF= $\log(f_{h3}/f_{l3})$ = number of frequency decades transferred.

Plitron General Purpose Toroidal Power Transformers

We have selected a number of items from Plitron's Standard Power Transformer line to cover a variety of solid state applications such as pre-amps, DAC's, active crossovers, and power amplifiers. Other models are available, but please note that the minimum order for non-stock transformers is five units. The Plitron Standard Power Transformer Line is characterized by its tight regulation and low temperature rise. All of the standard power transformers that we carry have a 117V 60 Hz primary ONLY, and are CSA and UL approved. Primary lead outs are double insulated, and primary to secondary insulation is a minimum of three layers of class B (130°C) polyester tape. Secondary interwinding insulation is minimum two layers of polyester tape, and secondaries are bifilar wound for optimum coupling and balance. Temperature rise is maximum 40°C (72°F) at continuous rated load, and output voltage tolerance is better than 3% at full load. All Plitron power transformers come with a steel cup disc, two neoprene washers, a flat washer, bolt and nut for mounting hardware, and standard 105°C, 0.031" wall PVC sleeved magnet wire leads 200mm (7.9") long. Magnetically shielded models have multiple layers of grain oriented silicon steel laminated between insulation layers wrapped around the circumference of the transformer.



SKU#	Model #	Sec.Volts	VA	Reg.%	O.D.(mm)	H(mm)	Wt.(Kg)	Notes	Price \$US
55814	01A014000	18+18	30	18	70	38	0.45		\$25.75
55815	03A214000	18+18	80	12	97	39	1.00	1	\$32.85
55816	05A215000	22+22	160	8	110	50	1.80	1,2	\$38.80
55817	07A016000	25+25	300	6	110	62	2.60	3	\$44.85
55818	04A017000	30+30	120	11	95	47	1.20		\$31.25
55819	05A026000	40+40	160	8	110	50	1.80		\$35.60
55820	08A026000	40+40	500	4	135	67	4.00		\$58.00
55821	07A033000	50+50	300	6	110	62	2.60		\$44.85
55822	08A033000	50+50	500	4	135	67	4.00		\$58.00
55823	10A052000	60+60	750	4	150	85	5.50		\$67.75

NOTES 1.Magnetically shielded

2.Perfect for "Aunt Corey's Deluxe Buffered Passive Pre-Amp" Stereophile Vol. 14. #11 & Vol 15 #11
 3.Perfect for stereo version of Nelson Pass' Zen Amplifier Audio Amateur Two:1994 and Three:1994

HAMMOND TRANSFORMERS

The classic Hammond line of output and power transformers and power supply chokes is well known to a large number of audio hobbyists. Many Hammond models have been in production for decades, a tribute to their superior design and construction. With the exponential growth in popularity of vacuum tubed amplifiers in the last few years, Hammond have introduced several NEW models of output transformers, including three single ended designs!

The Parts Connection has selected a large number of Hammond models to carry, in order to cover as many applications as possible. This selection includes their new single ended output transformers, as well as their classic

1600 series of push pull output trannies, now ALL including 40% Ultra Linear taps, and with three new POTTED models. The 270 series of power transformers, with their integral 5.0 V and 6.3V filament secondaries will cover a WIDE variety of applications. The 150 and 193 (shielded) series of filter chokes will allow great flexibility in your power supply designs, while the 166 and 167 series filament transformers ensure coverage of almost all tube complements.

With our wide selection of Hammond transformers, The Parts Connection assures you of a suitable model for almost any application!

Hammond 1600 Series Single Ended Output Transformers

The Hammond 1600 series single ended output transformers feature X type bell end mounts with a matte black finish. They also include 40% UL taps for single ended pentode and tetrode applications! All include 4, 8, and 16 Ohm secondary taps.

SKU #	Transformer Model #	Audio Watts	Primary Max. Imped.	Dim. DC mA	Ref.	Weight (Kg)	Price \$US
55619	1627SE	25	2K5	100	X10	2.7	\$105.45
55620	1628SE	25	5K0	100	X10	2.7	\$105.45
55621	1640SE	50	1K25	200	X14	5.0	\$105.45



Hammond 1600 Series Push-Pull Output Transformers

The Hammond 1600 series push-pull output transformers also feature X type bell end mounts with a matte black finish. All models now include 40% UL primary taps and 4, 8, and 16 Ohm secondary taps. Also new in this series are heavier 16 ga. secondary hook-up wiring (8" long) for reduced power loss. All models are have a rated frequency response of 30 Hz to 30 KHz (-1.5dB max. ref. 1kHz) at RATED POWER, not at 1 watt as many other transformer manufacturers use. We have also included recommended tube types for each model.

SKU #	Transformer Model #	Audio Watts	Primary Dim. Imped.	Ref.	Weight (Kg)	For Tube Type P-P	Price \$US
55622	1620	20	6K6 CT	X18	1.6	6V6, EL84, 6L6 EL34, 807, 5881	\$45.00
55623	1650F	25	7K6 CT	X9	1.8	6V6, EL84, 6L6 EL34, 807, 5881	\$59.00
55624	1650H	40	6K6 CT	X19	2.9	6L6, EL34 807, 5881	\$90.00
55625	1650K	50	3K4 CT	X12	3.2	6550, 6L6, EL34 807, 5881, 6146B	\$95.00
55626	1650N	60	4K3 CT	X20	3.6	KT88, 6L6, EL34 6550, 807, 5881	\$85.00



Hammond 1600 Series Push Pull Output Transformers (con't)

SKU #	Transformer Model #	Audio Watts	Primary Dim. Imped.	Ref.	Weight (Kg)	For Tube Type P-P	Price \$US
55627	1650P	60	6K6 CT	X20	3.6	6V6, EL84, 6L6 EL34, 807, 5881	\$85.00
55628	1650R	100	5K0 CT	X15	5.5	KT88, EL34, 807 6550, 5881, 6L6	\$89.00
55629	1650T	120	1K9 CT	X16	6.4	6550, EL34, KT88 Parallel P-P	\$104.00

Hammond 1650 Series Potted Push-Pull Output Transformers

The Hammond 1650 series potted push-pull output transformers have all of the features of the regular 1650 series but are epoxy potted in sealed cases with terminals.



SKU #	Transformer Model #	Audio Watts	Primary Dim. Imped.	Ref.	Weight (Kg)	For Tube Type P-P	Price \$US
55631	1650KP	50	3K4 CT	Z10	5	6550, 6L6, EL34 807, 5881, 6146B	\$135.00
55632	1650PP	60	6K6 CT	Z11	5.5	6V6, EL84, 6L6 EL34, 807, 5881	\$163.00
55633	1650RP	100	5K0 CT	Z14	8.2	KT88, EL34, 807 6550, 5881, 6L6	\$180.00

Hammond DC Filter Chokes

The Hammond DC filter chokes come in two styles, the economical open bracket 153-159 series and the shielded type "X" mount 193 series. All inductances are measured at rated DC current, actual inductance is greater at lower currents and less above rated current. Tolerance on inductance and resistance is $\pm 15\%$. The 153-159 series have min. 5" (13cm) long leads, the 193 series have min. 8" (20cm) long leads. All coils are vacuum varnish impregnated for long life.



Hammond DC Filter Chokes - Open Bracket

SKU #	Choke Model #	Induct. Henries	Rated DC mA	Resist. Ohms	Max. Op. Voltage	Weight (Kg)	Dim. Ref.	Price \$US
55477	155H	5	50	270	400	.14	C5H	\$12.00
55478	156L	5	75	135	400	.23	C6H	\$12.00
55479	156R	1.5	200	56	400	.23	C6H	\$12.00
55480	157J	10	65	205	400	.45	C9H	\$21.00
55481	158L	15	75	411	400	.57	C10H	\$19.00
55482	158M	10	100	262	400	.57	C10H	\$19.00
55483	158Q	5	150	105	400	.57	C10H	\$19.00

Hammond DC Filter Chokes - Shielded "X" Mount

SKU #	Choke Model #	Induct. Henries	Rated DC mA	Resist. Ohms	Max. Op. Voltage	Weight (Kg)	Dim. Ref.	Price \$US
56299	193C	20	100	181	600	1.5	X8	\$32.00
55485	193D	8	150	75	600	1.5	X8	\$32.00
55486	193H	5	200	65	600	1.1	X6	\$27.00
55487	193J	10	200	82	800	2.5	X11	\$44.00
55488	193L	5	300	57	800	2.5	X11	\$33.00

Hammond 270 Series Power Transformers

The Hammond 270 series power transformers use the convenient 4 hole above chassis "X" mounting. They feature two secondary filament windings, one 5.0V for tube rectifiers and a 6.3v for heater filaments. The primary and secondary leads are 6" (15cm) long min. All Hammond power transformers are conservatively rated and are CSA approved. Sorry, these are available with 115V 60Hz primaries ONLY.



SKU #	Transformer Model #	VA	Secondary DC Volts RMS MA	Fil. 1 Rectifier	Fil. 2 Heater	Weight (Kg)	Dim. Ref.	Price \$US
55465	270BX	53	275-0-275 50	5.0@2A	6.3@2A	1.5	X6	\$40.00
55466	270HX	176	275-0-275 90	5.0ct@3A	6.3ct@6A	3.6	X19	\$67.00
55467	272BX	95	300-0-300 100	5.0@2A	6.3@3A	2.5	X8	\$47.00
55468	272FX	146	300-0-300 150	5.0ct@3A	6.3ct@5A	3.6	X10	\$59.00
55469	272JX	236	300-0-300 250	5.0ct@4A	6.3ct@8A	4.8	X13	\$72.00
55470	273BX	182	350-0-350 175	5.0@3A	6.3ct@5A	4.0	X19	\$62.00
55471	274X	138	375-0-375 110	5.0@3A	6.3ct@5A	3.2	X10	\$54.00
55472	274BX	198	375-0-375 175	5.0@3A	6.3ct@6A	4	X19	\$66.00
55475	278X	229	400-0-400 200	5.0ct@3A	6.3ct@6A	4.8	X19	\$84.00
55476	278CX	454	400-0-400 465	-----	6.3ct@6A	7.3	X15	\$89.00

Hammond Low Voltage and Filament Transformers

The Hammond 166 open channel frame series and 167 shielded "X" mount series low voltage transformers all have a 115V 60Hz primary and are CSA certified. Primary and secondary leads are 6" (15cm) long minimum.



Hammond Low Voltage and Filament Transformers - Open Frame

SKU #	Transformer Model #	Full Load Volts	No Load Volts	Current Amps	Dim. Ref.	Weight (Kg)	Price \$US
55489	166L2	2.5 ct	2.90	2.5	C6H	.27	\$16.00
55490	166Q2	2.5 ct	3.03	6.0	C8H	.39	\$17.50
55491	166L5	5.0 ct	5.50	2.0	C7H	.32	\$15.50
55492	166L6	6.3 ct	7.14	2.0	C7H	.33	\$16.00
55493	166N6	6.3 ct	6.90	4.0	C9H	.50	\$17.00
55494	166Q6	6.3 ct	6.70	6.0	C12H	.73	\$23.00
55495	166S6	6.3 ct	6.70	10.0	C14H	1.14	\$27.00

Hammond Low Voltage and Filament Transformers - Shielded "X" Mount

SKU #	Transformer Model #	Full Load Volts	No Load Volts	Current Amps	Dim. Ref.	Weight (Kg)	Price \$US
55496	167M5	5.0 ct	5.40	3.0	X1	.57	\$21.00
55497	167N6	6.3 ct	6.90	4.0	X2	.68	\$22.00
55498	167S6	6.3 ct	6.70	10.0	X6	1.36	\$30.50
55499	167U6	6.3 ct	6.75	16.0	X8	2.0	\$35.00

Hammond Dimension Tables

Type "X" Enclosed Bell End Vertical Mounting

Mounting Dimensions - Inches (mm)

Style	A	B	C	D	E	G - Mounting Slot
X1	1.88(48)	2.07(53)	2.50(64)	1.50(38)	1.14(29)	0.19 x 0.31 (4.8 x 7.9)
X2	1.88(48)	2.44(62)	2.50(64)	1.50(38)	1.56(40)	0.19 x 0.31 (4.8 x 7.9)
X6	2.50(64)	2.75(70)	3.06(78)	2.00(51)	1.69(43)	0.203 x 0.38 (5.2 x 9.6)
X8	2.50(64)	3.25(83)	3.06(78)	2.00(51)	2.19(56)	0.203 x 0.38 (5.2 x 9.6)
X9	2.50(64)	3.75(95)	3.06(78)	2.00(51)	2.69(68)	0.203 x 0.38 (5.2 x 9.6)
X10	3.13(80)	3.50(89)	3.81(97)	2.50(64)	2.19(56)	0.203 x 0.38 (5.2 x 9.6)
X11	3.13(80)	3.75(95)	3.81(97)	2.50(64)	2.44(62)	0.203 x 0.38 (5.2 x 9.6)
X12	3.13(80)	4.25(108)	3.81(97)	2.50(64)	2.94(75)	0.203 x 0.38 (5.2 x 9.6)
X13	3.75(95)	4.00(102)	4.56 (116)	3.00(76)	2.81(71)	0.203 x 0.38 (5.2 x 9.6)
X14	3.75(95)	4.50(114)	4.56 (116)	3.00(76)	3.31(84)	0.203 x 0.38 (5.2 x 9.6)
X15	3.75(95)	5.00(127)	4.56 (116)	3.00(76)	3.81(97)	0.203 x 0.38 (5.2 x 9.6)
X16	3.75(95)	5.50(140)	4.56 (116)	3.00(76)	4.31(109)	0.203 x 0.38 (5.2 x 9.6)
X18	2.50(64)	3.50(89)	3.06 (78)	2.00(51)	2.44(62)	0.203 x 0.38 (5.2 x 9.6)
X19	3.13(80)	4.00(102)	3.81(97)	2.50(64)	2.69(68)	0.203 x 0.38 (5.2 x 9.6)
X20	3.13(80)	4.69(119)	3.81(97)	2.50(64)	3.38(86)	0.203 x 0.38 (5.2 x 9.6)

Type "Z" Potted Surface Mount

Mounting Dimensions - Inches (mm)

Style	A	B	C	D	E	F	G
Z10	3.31(84)	3.88(98)	4.25(108)	2.50(64)	3.00(76)	3.31(84)	2.56(65)
Z11	3.63(92)	4.25(108)	4.38(115)	2.88(73)	3.50(89)	3.75(95)	3.00(76)
Z12	4.25(108)	5.00(127)	5.44(138)	3.38(86)	4.25(108)	4.50(114)	3.75(95)

Type "C" Horizontal Channel Bracket

Mounting Dimensions - Inches (mm)

Style	A	B	C	D	G - Mounting Hole
C4H	2.38(60)	0.69(18)	0.69(18)	1.06(27)	0.125(3.2)
C5H	2.38(60)	1.38(35)	1.38(35)	200(51)	0.125(3.2)
C6H	2.81(71)	1.50(38)	1.69(35)	2.38(60)	0.187(4.8)
C7H	2.81(71)	1.63(41)	1.69(35)	2.38(60)	0.187(4.8)
C8H	3.25(83)	1.63(41)	2.00(51)	2.81(71)	0.187(4.8)
C9H	3.25(83)	1.75(44)	2.00(51)	2.81(71)	0.187(4.8)
C10H	3.25(83)	2.00(51)	2.00(51)	2.81(71)	0.187(4.8)
C12H	3.69(94)	2.00(51)	2.31(59)	3.13(80)	0.187(4.8)
C14H	4.03(102)	2.25(57)	2.63(67)	3.56(90)	0.187(4.8)

TALEMA TOROIDAL TRANSFORMERS



These Talema little blue beauties, have low magnetic strayfield emmissions, and yet, have higher efficiencies compared to standard laminated transformers. Also lower "standby" current, reduced weight, and fully encapsulated durable body formation are attributes that Talema are proud of.

With dual primaries and dual secondaries, you may wire them in series or parallel configurations to suit your needs. These are recognized for Class A (105deg. C), and meets all requirements of Class E (125deg. C). UL and VDE recognized.

SKU#	VA	Parallel VAC @ a	Series VCT @ A	Dimensions (mm LxWxH)	Weight (Kg)	Price \$US
58681	1.6 VA	7 @ .228	14 @ .114	39.6 x 39.6 x 18.5	0.082	\$9.99
58682	1.6 VA	9 @ .178	18 @ .089	39.6 x 39.6 x 18.5	0.082	\$9.99
58683	1.6 VA	12 @ .134	24 @ .067	39.6 x 39.6 x 18.5	0.082	\$9.99
58684	1.6 VA	15 @ .106	30 @ .053	39.6 x 39.6 x 18.5	0.082	\$9.99
58685	1.6 VA	18 @ .088	36 @ .044	39.6 x 39.6 x 18.5	0.082	\$9.99
58686	1.6 VA	22 @ .072	44 @ .036	39.6 x 39.6 x 18.5	0.082	\$9.99
58687	3.2 VA	7 @ .458	14 @ .229	44.7 x 44.7 x 19.5	0.110	\$10.99
58688	3.2 VA	9 @ .356	18 @ .178	44.7 x 44.7 x 19.5	0.110	\$10.99
58689	3.2 VA	12 @ .266	24 @ .133	44.7 x 44.7 x 19.5	0.110	\$10.99
58690	3.2 VA	15 @ .214	30 @ .107	44.7 x 44.7 x 19.5	0.110	\$10.99
58691	3.2 VA	18 @ .178	36 @ .089	44.7 x 44.7 x 19.5	0.110	\$10.99
58692	3.2 VA	22 @ .146	44 @ .073	44.7 x 44.7 x 19.5	0.110	\$10.99
58693	5.0 VA	7 @ .714	14 @ .229	49.7 x 49.7 x 19.5	0.144	\$11.99
58694	5.0 VA	9 @ .556	18 @ .278	49.7 x 49.7 x 19.5	0.144	\$11.99
58695	5.0 VA	12 @ .416	24 @ .208	49.7 x 49.7 x 19.5	0.144	\$11.99
58696	5.0 VA	15 @ .334	30 @ .167	49.7 x 49.7 x 19.5	0.144	\$11.99
58697	5.0 VA	18 @ .278	36 @ .139	49.7 x 49.7 x 19.5	0.144	\$11.99
58698	5.0 VA	22 @ .228	44 @ .114	49.7 x 49.7 x 19.5	0.144	\$11.99
58699	7.0 VA	14 @ .500	14 @ .500	49.7 x 49.7 x 19.5	0.174	\$13.45
58700	7.0 VA	18 @ .389	18 @ .389	49.7 x 49.7 x 19.5	0.174	\$13.45
58701	7.0 VA	24 @ .292	24 @ .292	49.7 x 49.7 x 19.5	0.174	\$13.45
58702	7.0 VA	30 @ .233	30 @ .233	49.7 x 49.7 x 19.5	0.174	\$13.45
58703	7.0 VA	36 @ .194	36 @ .194	49.7 x 49.7 x 19.5	0.174	\$13.45
58704	7.0 VA	44 @ .159	44 @ .159	49.7 x 49.7 x 19.5	0.174	\$13.45
58705	10.0 VA	7 @ 1.428	14 @ .714	55.0 x 55.0 x 26.0	0.252	\$14.99
58706	10.0 VA	9 @ 1.112	18 @ .556	55.0 x 55.0 x 26.0	0.252	\$14.99
58707	10.0 VA	12 @ .834	24 @ .417	55.0 x 55.0 x 26.0	0.252	\$14.99
58708	10.0 VA	15 @ .666	30 @ .333	55.0 x 55.0 x 26.0	0.252	\$14.99
58709	10.0 VA	18 @ .556	36 @ .278	55.0 x 55.0 x 26.0	0.252	\$14.99
58710	10.0 VA	22 @ .454	44 @ .227	55.0 x 55.0 x 26.0	0.252	\$14.99
58711	15.0 VA	7 @ 2.142	14 @ 1.071	60.0 x 60.0 x 26.3	0.304	\$16.99
58712	15.0 VA	9 @ 1.666	18 @ .833	60.0 x 60.0 x 26.3	0.304	\$16.99
58713	15.0 VA	12 @ 1.250	24 @ .625	60.0 x 60.0 x 26.3	0.304	\$16.99
58714	15.0 VA	15 @ 1.000	30 @ .500	60.0 x 60.0 x 26.3	0.304	\$16.99
58715	15.0 VA	18 @ .834	36 @ .417	60.0 x 60.0 x 26.3	0.304	\$16.99
58716	15.0 VA	22 @ .682	44 @ .341	60.0 x 60.0 x 26.3	0.304	\$16.99

Talema Toroidal Transformers (con't)

SKU#	VA	Parallel VAC @ a	Series VCT @ A	Dimensions (mm LxWxH)	Weight (Kg)	Price \$US
58717	25.0 VA	7 @ 3.570	14 @ 1.785	60.0 x 60.0 x 37.5	0.435	\$18.99
58718	25.0 VA	9 @ 2.754	18 @ 1.377	60.0 x 60.0 x 37.5	0.435	\$18.99
58719	25.0 VA	12 @ 2.082	24 @ 1.041	60.0 x 60.0 x 37.5	0.435	\$18.99
58720	25.0 VA	15 @ 1.664	30 @ .832	60.0 x 60.0 x 37.5	0.435	\$18.99
58721	25.0 VA	18 @ 1.388	36 @ .694	60.0 x 60.0 x 37.5	0.435	\$18.99
58722	25.0 VA	22 @ 1.136	44 @ .568	60.0 x 60.0 x 37.5	0.435	\$18.99
58723	35.0 VA	7 @ 5.000	14 @ 2.500	72.0 x 72.0 x 37.5	0.525	\$22.99
58724	35.0 VA	9 @ 3.888	18 @ 1.944	72.0 x 72.0 x 37.5	0.525	\$22.99
58725	35.0 VA	12 @ 2.916	24 @ 1.458	72.0 x 72.0 x 37.5	0.525	\$22.99
58726	35.0 VA	15 @ 2.332	30 @ 1.166	72.0 x 72.0 x 37.5	0.525	\$22.99
58727	35.0 VA	18 @ 1.944	36 @ .972	72.0 x 72.0 x 37.5	0.525	\$22.99
58728	35.0 VA	22 @ 1.590	44 @ .795	72.0 x 72.0 x 37.5	0.525	\$22.99
58729	50.0 VA	7 @ 7.142	14 @ 3.571	82.4 x 82.4 x 37.5	0.685	\$28.99
58730	50.0 VA	9 @ 5.554	18 @ 2.777	82.4 x 82.4 x 37.5	0.685	\$28.99
58731	50.0 VA	12 @ 4.166	24 @ 2.083	82.4 x 82.4 x 37.5	0.685	\$28.99
58732	50.0 VA	15 @ 3.332	30 @ 1.666	82.4 x 82.4 x 37.5	0.685	\$28.99
58733	50.0 VA	18 @ 2.776	36 @ 1.388	82.4 x 82.4 x 37.5	0.685	\$28.99
58734	50.0 VA	22 @ 2.272	44 @ 1.136	82.4 x 82.4 x 37.5	0.685	\$28.99

CAPACITORS

FILM



RELIABLE CAPACITORS

Incorporated in 1962, Rel Cap has become a leading and innovative producer of plastic film dielectric capacitors. Custom designed caps are now a part of the company's standard capabilities. Rel Cap has long produced capacitors for the telecommunication, computer, industrial, and consumer OEM markets and includes a division specializing in hermetically sealed capacitors for military, aerospace, instrumentation and high-voltage applications, and high temperature usage in oil drilling, power supply manufacture, and for nuclear environments.

Rel now introduces a division devoted to audio and video manufacturers, modifiers, and distributors. In the MultiCap™, Exotica™ and AudioCap™ product lines, the company's abilities in the fields above are combined and concentrated into special lines that will meet the most exacting audio and video specifications.

MULTICAP LINE

The MultiCap was conceived for high-current, high-speed, pulsed-power applications. It is ideal for audio, video, and high-frequency designs because its patented construction, which winds capacitors coaxially one upon the other into a single unit, significantly reducing typical capacitor losses. Since each coaxial section is in parallel, the inductance of the overall capacitor never exceeds that of a piece of lead wire the same length as the capacitor's body. Measured equivalent series resistance (ESR) values are 5 to 10 times lower than conventional design. MultiCap's patented internal bypass design also solves the problems of multiple resonances encountered when a circuit's high-frequency impedance is lowered by externally paralleling a large, conventionally wound capacitor with smaller ones, as in conventional bypassing. In addition, the MultiCap uses the finest film materials and proprietary slow-winding construction techniques to further reduce dissipation factor (DF) and dielectric absorption (DA). The MultiCap offers substantial advantages in bypassing and in high-current applications, where losses can be significant.

MULTICAP™ - RTX: Polystyrene Film & Tin Foil

MultiCap™

RTX

The polystyrene film and tin foil RTX MultiCap series is the ultimate for a no-compromise design where the maximum in resolution and detail is desired. The RTX is excellent in low signal level applications such as phono stages and tubed DAC output stages, but its high current film and foil construction also makes it suitable for high resolution loudspeaker crossovers, especially in tweeter circuits.

MultiCap™- RTX: Polystyrene Film & Tin Foil (Axial Leads - Round case)

SKU #	µf	DCVolts	Tolerance	Dimensions (Approx)	Price \$US
51275	0.01	400v	10%	0.4" D x 0.75" L	\$3.57
51276	0.01	600v	10%	0.5" D x 1.1" L	\$5.46
53349	.015	200v	10%	0.4" D x 0.8" L	\$3.75
51301	.015	400v	10%	0.4" D x 0.8" L	\$3.71
51302	.015	600v	10%	0.4" D x 0.8" L	\$5.73
51277	0.022	600v	10%	0.5" D x 1.1" L	\$6.37
51278	0.033	600v	10%	0.7" D x 1.1" L	\$7.15
51279	0.047	600v	10%	0.7" D x 1.3" L	\$7.51
51280	0.068	100v	10%	0.4" D x 1.1" L	\$6.22
51281	0.068	600v	10%	0.7" D x 1.3" L	\$8.65
51282	0.10	100v	10%	0.4" D x 1.1" L	\$6.87
51283	0.10	400v	10%	0.6" D x 1.6" L	\$7.42
51284	0.10	600v	10%	0.8" D x 1.5" L	\$11.63
51285	0.15	100v	10%	0.5" D x 1.1" L	\$8.10
51286	0.22	400v	10%	0.7" D x 1.8" L	\$12.22
51287	0.22	600v	10%	1.1" D x 1.8" L	\$14.96
51288	0.33	400v	10%	0.8" D x 1.8" L	\$13.68
51289	0.33	600v	10%	1.1" D x 1.8" L	\$18.27
51290	0.47	400v	10%	1.2" D x 1.8" L	\$16.89
51291	0.47	600v	10%	1.2" D x 2.4" L	\$21.32
51292	0.68	400v	10%	1.2" D x 1.8" L	\$19.84
51293	0.75	400v	10%	1.2" D x 1.8" L	\$22.80
51294	0.82	400v	10%	1.2" D x 1.8" L	\$24.29
51295	1.0	100v	10%	0.8" D x 1.8" L	\$17.01
51296	1.0	200v	10%	1.2" D x 1.8" L	\$19.76
51297	1.0	400v	10%	1.2" D x 2.4" L	\$30.77
51298	1.5	200v	10%	1.4" D x 1.8" L	\$24.90
51299	2.0	200v	10%	1.4" D x 2.3" L	\$32.76
51300	3.0	200v	10%	1.5" D x 2.3" L	\$45.88

MultiCap™ - PPFX-S:
Polypropylene Film & Tin Foil

PPFX-S

The polypropylene film and tin foil PPFX-S MultiCap series is a close second to the RTX in terms of resolution, and is an excellent alternative to it in applications where a higher temperature rating (65-105 degrees C without voltage de-rating) is required as in some tubed power amplifier applications, in larger values not available in the RTX series, or where space is limited. The PPFX-S is also excellent for no-compromise high current loudspeaker crossover applications.

MultiCap™ - PPFX-S:
Polypropylene Film & Tin Foil (Axial Leads - Oval Case)

SKU #	µF	DCVolts	Tolerance	Dimensions (Approx)	Price \$US
51342	0.10	400v	10%	0.3" W x 0.5"H x 1.0" L	\$6.16
51343	0.10	600v	10%	0.4" W x 0.6"H x 1.1" L	\$8.09
51344	0.22	400v	10%	0.4" W x 0.6"H x 1.1" L	\$9.18
51345	0.22	600v	10%	0.5" W x 0.7"H x 1.2" L	\$9.60
51347	0.33	400v	10%	0.5" W x 0.7"H x 1.3" L	\$10.62
51348	0.33	600v	10%	0.6" W x 0.8"H x 1.3" L	\$11.48
51350	0.47	400v	10%	0.5" W x 0.8"H x 1.3" L	\$13.18
51351	0.47	600v	10%	0.7" W x 0.9"H x 1.3" L	\$14.95
51352	0.47	800v	10%	0.8" W x 1.0"H x 1.8" L	\$30.69
51353	0.68	400v	10%	0.6" W x 0.9"H x 1.4" L	\$15.50
51354	0.68	600v	10%	0.7" W x 0.9"H x 1.8" L	\$17.67
51356	1.0	100v	10%	0.5" W x 0.7"H x 1.3" L	\$14.17
51357	1.0	200v	10%	0.6" W x 0.9"H x 1.3" L	\$15.50
51358	1.0	400v	10%	0.7" W x 1.0"H x 1.3" L	\$32.54
51359	1.0	600v	10%	0.8" W x 1.1"H x 1.8" L	\$35.30
51361	1.5	200v	10%	0.6W x 1.0"H x 1.3" L	\$18.21
51362	2.0	100v	10%	0.7" W x 1.0"H x 1.3" L	\$19.80
51363	2.0	200v	10%	0.9" W x 1.1"H x 1.3" L	\$20.61
51364	2.0	400v	10%	0.8" W x 1.1"H x 1.8" L	\$60.28
51365	3.0	100v	10%	0.9" W x 1.1"H x 1.3" L	\$25.78
51366	3.0	200v	10%	0.9" W x 1.1"H x 1.8" L	\$27.48
51368	4.0	100v	10%	0.9" W x 1.2"H x 1.3" L	\$34.60
51369	4.0	200v	10%	1.0" W x 1.3"H x 1.8" L	\$36.71
51370	5.0	100v	10%	0.9" W x 1.1"H x 1.8" L	\$40.05
51371	5.0	200v	10%	1.2" W x 1.5"H x 1.8" L	\$42.66
51372	6.0	200v	10%	1.2" W x 1.5"H x 1.8" L	\$48.01
51373	7.0	100v	10%	1.1" W x 1.2"H x 1.8" L	\$48.66
51374	8.0	100v	10%	1.1" W x 1.4"H x 1.8" L	\$51.90
51375	8.0	200v	10%	1.2" W x 1.5"H x 2.3" L	\$57.09
51376	9.0	100v	10%	1.2" W x 1.4"H x 1.8" L	\$55.89
51377	12.0	200v	10%	1.4" W x 1.7"H x 2.3" L	\$70.09

MULTICAP™ - PPFX:
Polypropylene Film & Aluminum Foil



PPFX

The polypropylene film and aluminum foil PPFX MultiCap series is an excellent lower cost alternative to the RTX or PPFX-S series where the superior resolution and dynamics of a film and foil capacitor are still desired. The PPFX is very popular as a coupling cap in line stage pre-amps and power amps, and in loudspeaker crossover networks. It is the classic polypropylene film and foil MultiCap.

Note: When existing PPFX stocks are depleted, there will be a 50pc/value minimum order.

MultiCap™ - PPFX:
Polypropylene Film & Aluminum Foil (Axial Leads - Oval case)

SKU #	µF	DCVolts	Tolerance	Dimensions (Approx)	Price \$US
51303	0.10	400v	10%	0.3" W x 0.5" H x 1.0" L	\$5.34
51304	0.10	600v	10%	0.4" W x 0.6" H x 1.1" L	\$6.77
51305	0.15	400v	10%	0.4" W x 0.6" H x 1.1" L	\$6.08
51306	0.22	400v	10%	0.4" W x 0.6" H x 1.1" L	\$7.14
51307	0.22	600v	10%	0.5" W x 0.7" H x 1.2" L	\$7.89
51308	0.22	800v	10%	0.7" W x 0.9" H x 1.3" L	\$18.93
51309	0.33	400v	10%	0.5" W x 0.7" H x 1.3" L	\$8.26
51310	0.33	600v	10%	0.6" W x 0.8" H x 1.3" L	\$8.92
51311	0.47	400v	10%	0.5" W x 0.8" H x 1.3" L	\$10.25
51312	0.47	600v	10%	0.7" W x 0.9" H x 1.2" L	\$11.63
51313	0.47	800v	10%	0.8" W x 1.1" H x 1.8" L	\$23.86
51314	0.68	400v	10%	0.6" W x 0.9" H x 1.4" L	\$12.06
51315	0.68	600v	10%	0.7" W x 0.9" H x 1.8" L	\$13.74
51316	0.68	800v	10%	1.0" W x 1.3" H x 1.8" L	\$28.80
51317	1.0	100v	10%	0.5" W x 0.7" H x 1.3" L	\$9.61
51318	1.0	200v	10%	0.6" W x 0.9" H x 1.3" L	\$10.85
51319	1.0	400v	10%	0.7" W x 1.0" H x 1.3" L	\$22.78
51320	1.0	600v	10%	0.8" W x 1.1" H x 1.8" L	\$24.71
51321	1.0	800v	10%	1.2" W x 1.5" H x 1.8" L	\$31.25
51322	1.5	200v	10%	0.7" W x 1.0" H x 1.3" L	\$12.75
51323	2.0	100v	10%	0.7" W x 1.0" H x 1.3" L	\$13.77
51324	2.0	200v	10%	0.9" W x 1.1" H x 1.3" L	\$14.44
51325	2.0	400v	10%	0.8" W x 1.1" H x 1.8" L	\$42.19
51326	2.7	100v	10%	0.9" W x 1.1" H x 1.3" L	\$19.21
51327	3.0	100v	10%	0.9" W x 1.1" H x 1.4" L	\$18.04
51328	3.0	200v	10%	0.9" W x 1.1" H x 1.8" L	\$19.23
51329	4.0	100v	10%	0.9" W x 1.2" H x 1.3" L	\$24.20
51330	4.0	200v	10%	1.0" W x 1.3" H x 1.8" L	\$25.71
51331	5.0	100v	10%	0.9" W x 1.1" H x 1.8" L	\$28.03
51332	5.0	200v	10%	1.2" W x 1.5" H x 1.8" L	\$29.87
51333	6.0	200v	10%	1.2" W x 1.5" H x 1.8" L	\$33.60
51334	7.0	200v	10%	1.1" W x 1.4" H x 2.3" L	\$36.92
51335	8.0	100v	10%	1.1" W x 1.4" H x 1.8" L	\$37.55
51336	8.0	200v	10%	1.2" W x 1.5" H x 2.3" L	\$39.96
51337	9.0	100v	10%	1.2" W x 1.4" H x 1.8" L	\$37.85
51341	10.0	100v	10%	1.4" W x 1.7" H x 1.8" L	\$40.55
51338	10.0	200v	10%	1.4" W x 1.7" H x 2.3" L	\$42.98
51339	12.0	200v	10%	1.5" W x 1.7" H x 2.3" L	\$49.06

CAPACITORS

MULTICAP™ - PPMFX: Metallized Polypropylene



PPMFX

The metallized polypropylene PPMFX MultiCap series is a great choice in a metallized polypropylene capacitor where the superior detail and time coherency of the MultiCap design is required. Their much more compact size also makes them the natural choice in applications with limited space, and the wide selection of values and voltage ratings ensure that you will find just what you need.

MultiCap™- PPMFX: Metallized Polypropylene (Axial Leads - Oval case)

SKU #	μf	DCVolts	Tolerance	Dimensions (Approx)	Price \$US
51378	0.001 (1000pf)	600v	10%	0.2" W x 0.3" H x 0.4" L	\$3.30
51379	0.0015 (1500pf)	600v	10%	0.2" W x 0.3" H x 0.4" L	\$3.30
51380	0.0018 (1800pf)	600v	10%	0.2" W x 0.3" H x 0.4" L	\$3.30
51381	0.002 (2000pf)	600v	10%	0.2" W x 0.3" H x 0.4" L	\$3.44
51382	0.0022 (2200pf)	600v	10%	0.2" W x 0.3" H x 0.4" L	\$3.44
51383	0.0024 (2400pf)	600v	10%	0.2" W x 0.3" H x 0.4" L	\$3.44
51384	0.0027 (2700pf)	600v	10%	0.2" W x 0.3" H x 0.4" L	\$3.44
51385	0.003 (3000pf)	600v	10%	0.2" W x 0.3" H x 0.4" L	\$3.59
51386	0.0033 (3300pf)	600v	10%	0.3" W x 0.4" H x 0.4" L	\$3.59
51387	0.0036 (3600pf)	600v	10%	0.3" W x 0.3" H x 0.4" L	\$3.59
51388	0.0039 (3900pf)	600v	10%	0.3" W x 0.4" H x 0.4" L	\$3.59
51389	0.0047 (4700pf)	600v	10%	0.3" W x 0.3" H x 0.4" L	\$3.59
51390	.0050 (5000pf)	600v	10%	0.3" W x 0.4" H x 0.4" L	\$3.73
51391	0.0051 (5100pf)	600v	10%	0.3" W x 0.3" H x 0.4" L	\$3.73
51392	0.0056 (5600pf)	600v	10%	0.3" W x 0.4" H x 0.5" L	\$3.73
51393	0.0062 (6200pf)	600v	10%	0.2" W x 0.3" H x 0.5" L	\$3.73
51394	0.0068 (6800pf)	600v	10%	0.2" W x 0.3" H x 0.5" L	\$3.73
51395	0.0075 (7500pf)	600v	10%	0.2" W x 0.3" H x 0.5" L	\$3.73
51396	0.0082 (8200pf)	600v	10%	0.2" W x 0.3" H x 0.5" L	\$3.73
51397	0.010	600v	10%	0.2" W x 0.3" H x 0.6" L	\$3.87
51398	0.022	600v	10%	0.2" W x 0.4" H x 0.6" L	\$3.87
51399	0.033	600v	10%	0.3" W x 0.4" H x 0.6" L	\$3.87
51400	0.047	600v	10%	0.3" W x 0.4" H x 0.6" L	\$3.87
51401	0.068	600v	10%	0.3" W x 0.4" H x 0.7" L	\$4.02
51402	0.10	400v	10%	0.3" W x 0.5" H x 0.8" L	\$4.39
51403	0.10	600v	10%	0.3" W x 0.6" H x 0.8" L	\$6.63

MultiCap™- PPMFX: (con't) Metallized Polypropylene (Axial Leads - Oval case)

SKU #	μf	DCVolts	Tolerance	Dimensions (Approx)	Price \$US
51404	0.22	200v	10%	0.3" W x 0.5" H x 0.8" L	\$3.90
51405	0.22	400v	10%	0.4" W x 0.6" H x 0.8" L	\$4.71
51406	0.22	600v	10%	0.5" W x 0.6" H x 1.0" L	\$7.32
51407	0.33	200v	10%	0.3" W x 0.5" H x 0.8" L	\$4.08
51408	0.33	400v	10%	0.3" W x 0.6" H x 1.1" L	\$6.35
51409	0.33	600v	10%	0.5" W x 0.7" H x 1.0" L	\$8.50
51410	0.47	200v	10%	0.3" W x 0.5" H x 1.0" L	\$4.31
51411	0.47	400v	10%	0.5" W x 0.7" H x 1.0" L	\$6.26
51412	0.47	600v	10%	0.4" W x 0.7" H x 1.8" L	\$9.70
51413	0.68	200v	10%	0.4" W x 0.6" H x 1.1" L	\$4.94
51414	0.68	400v	10%	0.5" W x 0.8" H x 1.3" L	\$7.86
51415	0.68	600v	10%	0.7" W x 0.9" H x 1.3" L	\$10.82
51416	0.82	200v	10%	0.4" W x 0.6" H x 1.0" L	\$5.20
51417	1.0	200v	10%	0.5" W x 0.7" H x 1.1" L	\$6.11
51418	1.0	400v	10%	0.7" W x 0.8" H x 1.3" L	\$9.10
51419	1.0	600v	10%	0.7" W x 1.0" H x 1.3" L	\$12.20
51420	1.5	200v	10%	0.6" W x 0.8" H x 1.1" L	\$7.29
51421	2.0	200v	10%	0.6" W x 0.8" H x 1.3" L	\$7.89
51422	2.0	400v	10%	1.0" W x 1.1" H x 1.3" L	\$12.31
51423	3.0	200v	10%	0.7" W x 0.9" H x 1.3" L	\$9.59
51424	3.0	400v	10%	0.9" W x 1.1" H x 1.8" L	\$16.91
51425	4.0	200v	10%	0.7" W x 0.9" H x 1.5" L	\$11.25
51426	4.0	400v	10%	1.1" W x 1.2" H x 1.8" L	\$18.37
51427	5.0	100v	10%	0.6" W x 0.8" H x 1.4" L	\$8.12
51428	5.0	200v	10%	0.7" W x 0.9" H x 1.8" L	\$12.89
51429	5.0	400v	10%	1.2" W x 1.4" H x 1.8" L	\$20.12
51430	6.0	200v	10%	0.8" W x 1.0" H x 1.8" L	\$13.72
51431	6.0	400v	10%	1.3" W x 1.4" H x 1.8" L	\$23.62
51432	7.0	200v	10%	0.9" W x 1.0" H x 1.8" L	\$16.30
51433	8.0	200v	10%	0.9" W x 1.1" H x 1.8" L	\$17.37
51434	9.0	200v	10%	0.9" W x 1.1" H x 2.1" L	\$18.92
51435	10.0	200v	10%	1.0" W x 1.2" H x 2.1" L	\$20.47
51436	12.0	200v	10%	1.0" W x 1.2" H x 2.0" L	\$22.47
51437	15.0	200v	10%	1.1" W x 1.3" H x 2.0" L	\$25.63
51438	20.0	200v	10%	1.3" W x 1.5" H x 2.1" L	\$31.40
51439	30.0	200v	10%	1.3" W x 1.5" H x 2.8" L	\$43.77



EXOTICA LINE

Film and foil capacitors of special design and construction, made with the finest materials available for audio capacitors to bring out the highest performance possible in the most sensitive, highly resolving equipment.

Exotica™

Exotica - Teflon TFT

This series, with Teflon film, has electrical properties that allow it to withstand high temperatures. Listening tests reveal superb sonic qualities, making it the designer's choice whenever only the highest performance will do. The TFT is suitable for all audio applications, and will provide high performance and long life.

Exotica - TFT Film and Foil Teflon (Radial Leads)

SKU #	µF	DCVolts	Tolerance	Dimensions (Approx)	Price \$US
58800	0.01	200v	10%	0.21"D x 0.53" L	\$21.39
58801	0.01	400v	10%	0.203"D x 0.75" L	\$23.85
51485	0.01	600v	10%	0.27"D x 0.75" L	\$26.51
58803	0.022	200v	10%	0.23" D x 0.75" L	\$22.14
58804	0.022	400v	10%	0.28" D x 0.75" L	\$25.27
58805	0.022	600v	10%	0.31"D x 1.00" L	\$27.46
58806	0.033	200v	10%	0.275" D x 0.75" L	\$22.90
58807	0.033	400v	10%	0.273"D x 1.0" L	\$25.65
58808	0.033	600v	10%	0.37"D x 1.00" L	\$28.41
58809	0.047	100v	10%	0.32"D x 0.75" L	\$19.95
58810	0.047	200v	10%	0.32" D x 0.75" L	\$24.32
58811	0.047	400v	10%	0.32" D x 1.0" L	\$27.08
58812	0.047	600v	10%	0.44"D x 1.00" L	\$30.31
58813	0.068	100v	10%	0.28"D x 0.75" L	\$22.33
58814	0.068	200v	10%	0.305"D x 1.0" L	\$25.75
58815	0.068	400v	10%	0.378" D x 1.0" L	\$28.84
58816	0.068	600v	10%	0.45"D x 1.25" L	\$31.73
58817	0.10	100v	10%	0.245" D x 0.75" L	\$24.89
53350	0.10	200v	10%	0.365" D x 1.0" L	\$28.60
58819	0.10	400v	10%	0.453" D x 1.0" L	\$32.11
51486	0.1	600v	10%	0.54"D x 1.25" L	\$43.75
58821	0.22	100v	10%	0.34" D x 0.75" L	\$50.83
53351	0.22	200v	10%	0.45"D x 1.25" L	\$63.00
58823	0.22	400v	10%	0.565" D x 1.25" L	\$65.84
53352	0.22	600v	10%	0.71"D x 1.50" L	\$75.00
58825	0.33	100v	10%	0.33" D x 1.0" L	\$62.70
58826	0.33	200v	10%	0.55"D x 1.25" L	\$72.11
58827	0.33	400v	10%	0.62" D x 1.5" L	\$86.64
58828	0.47	100v	10%	0.39" D x 1.0" L	\$75.05
58829	0.47	200v	10%	0.586" D x 1.5" L	\$86.03
58830	0.68	200v	10%	0.698" D x 1.5" L	\$142.20
58831	1.0	200v	10%	0.820" D x 1.5" L	\$198.36

Exotica - Copper Foil Polypropylene Film PCU

This series, with copper foil, has low distortion and provides superbly clean, clear performance. The PCU is especially suitable for ultra-high frequencies, bringing a remarkable clarity in this sonic range. Special manufacturing techniques are required to ensure that copper will remain reliable and provide high performance over time. The gold-plated OFHC lead wires provide long-term reliability, superior to silver wires owing to gold's non-oxidizing properties; the matching of copper foil with copper leads ensures long-term high performance. Capacitance of .1 µF to 2.0 µF, at 100, 200, 400, 600, 800 volts, in case form..

Please call for specs, prices and availability.

Exotica - Prime... State of the Art Performance!

The Exotica Prime capacitor is a proprietary design from Richard Marsh, hand-built to the highest specs, to satisfy the perfectionist. It offers unrivaled audio performance. It offers ultra-low distortion and extreme clarity through the full audible frequency range. In listening tests, it has proven superior even to MultiCap polystyrene and AudioCap Teflon in sensitive equipment. Capacitance of .10 µF to 1.0 µF, at 200, 400 volts, in case form. This is offered now as a custom product only. Applications: coupling, bypass, filters.

Please call for specs, prices and availability.

REL-CAP

RT Series Polystyrene Film and Foil



The REL-CAP RT series film and foil polystyrenes are an excellent choice for critical signal path applications such as phono RIAA circuits, feedback compensation caps, or anywhere else that you need a high quality picofarad value capacitor. The RT series feature a black epoxy filled plastic cased radial lead package that is 0.30" (7.5mm) square x 0.51 (13mm) high with a 0.275 (7mm) lead spacing. Leads are located at diagonal corners. All REL-CAP RT series caps are rated 600 Volts DC and are 2% tolerance.

Rel-Cap RT Series Polystyrene Film and Foil (Radial leads)

SKU#	Value pF	SKU#	Value pF	SKU #	Value pF	Price \$US
51611	510	51612	560	51613	700	
55339	750	51614	820	51615	1070	
51616	1200	55338	1431	51617	1450	
51618	1850	51619	2000	51620	2400	
51621	2700	51622	3000	51623	3200	
51624	3600	51625	3900	51626	4200	
51627	4700	51628	5000	51629	5600	
51630	6200	51631	6800	51632	7500	
51633	8000	51634	8800	51635	0.01µF	\$2.95

CAPACITORS

NEW

AUDIOCAP LINE



This line offers five series of high-quality, high-performance caps at competitive prices, designed to meet specific needs of speaker, electronics, and audio/video power supply designers. A full line of film capacitors.

AudioCap™ - Metalized Polypropylene Capacitor PPMF

The PPMF AudioCaps are metalized polypropylene, useful as upgrade from Mylar or inferior film caps, and available in values large enough to be ideal for speaker crossover networks. They are built of the best materials and exhibit excellent electrical and environmental characteristics. Their superior build quality and high capacitance values provide a high-quality stable, long-term performance not usually found in this price range. The gold-plated OFHC leads provide long-term high reliability and excellent solderability, superior to silver wire because of gold's non-oxidizing properties. It is available in values up to 100 microfarads, making it ideal for speaker crossovers.

Audio Cap™ - Metalized Polypropylene (Radial Leads)

SKU #	µF	DCVolts	Tolerance	Dimensions (Approx)	Price \$US
58747	0.68	100v	10%	0.3" W x 0.45" H x 0.69" L	\$3.48
58748	0.68	200v	10%	0.3" W x 0.45" H x 1.2" L	\$3.33
58749	0.68	400v	10%	0.63" W x 0.76" H x 1.4" L	\$4.98
58750	0.82	100v	10%	0.32" W x 0.44" H x 0.69" L	\$3.69
58751	0.82	200v	10%	0.32" W x 0.53" H x 1.2" L	\$3.52
58752	1.0	100v	10%	0.35" W x 0.48" H x 0.69" L	\$4.29
58753	1.0	200v	10%	0.37" W x 0.53" H x 1.2" L	\$4.09
58754	1.0	400v	10%	0.64" W x 0.84" H x 1.4" L	\$5.76
58755	1.5	100v	10%	0.34" W x 0.46" H x 0.94" L	\$5.17
58756	1.5	200v	10%	0.45" W x 0.59" H x 1.2" L	\$4.94
58757	2.0	100v	10%	0.39" W x 0.53" H x 0.94" L	\$5.57
58758	2.0	200v	10%	0.55" W x 0.65" H x 1.2" L	\$5.32
58759	2.0	400v	10%	0.85" W x 1.0" H x 1.7" L	\$7.79
58760	3.0	100v	10%	0.51" W x 0.63" H x 0.94" L	\$6.50
58761	3.0	200v	10%	0.68" W x 0.68" H x 0.1.2" L	\$6.18
58762	3.0	400v	10%	0.97" W x 1.2" H x 1.9" L	\$10.64
58763	5.0	100v	10%	0.6" W x 0.8" H x 1.2" L	\$8.74
58764	5.0	200v	10%	0.71" W x 0.85" H x 1.7" L	\$8.36
58765	8.0	100v	10%	0.6" W x 0.8" H x 1.4" L	\$12.26
58766	8.0	200v	10%	0.88" W x 1.0" H x 1.7" L	\$11.36
58767	10.0	100v	10%	0.68" W x 0.88" H x 1.4" L	\$13.98
58768	10.0	200v	10%	0.99" W x 1.2" H x 1.7" L	\$12.96
58769	15.0	100v	10%	0.91" W x 1.2" H x 1.4" L	\$17.56
58770	15.0	200v	10%	1.2" W x 1.4" H x 2.0" L	\$16.25
58771	20.0	100v	10%	0.88" W x 1.1" H x 1.8" L	\$21.74
58772	20.0	200v	10%	1.3" W x 1.5" H x 2.0" L	\$19.95
58773	30.0	100v	10%	1.1" W x 1.3" H x 2.1" L	\$30.27
58774	30.0	200v	10%	1.4" W x 1.6" H x 2.8" L	\$27.74
58775	40.0	100v	10%	1.3" W x 1.5" H x 2.0" L	\$36.67
58776	50.0	200v	10%	1.3" W x 1.6" H x 2.3" L	\$43.23
58777	60.0	100v	10%	1.4" W x 1.6" H x 02.8" L	\$49.40
58778	70.0	100v	10%	1.4" W x 1.6" H x 3.3" L	\$55.86
58779	80.0	100v	10%	1.4" W x 1.6" H x 3.3" L	\$62.23
58780	100.0	100v	10%	1.5" W x 1.8" H x 3.3" L	\$69.35

WIMA



Made in Germany, Wima is an excellent low cost line of metallized polypropylene capacitors in a radial lead package. The Wima MKP-10 series are ideally suited for power supply by-pass applications, but also provide very good results when used as signal-path coupling capacitors. Their small size and radial lead packaging make them well suited for PCB mounting. All Wima MKP-10's are red in colour, and have 0.2" (5mm) long leads.

Wima MKP-10 – Metallized Polypropylene (Radial leads)

SKU#	Value µF	DCVolts	Tol %	Dim. in. (mm) L x W x H	Price \$US
Lead Spacing					
51521	0.01	630	10	0.7 x 0.2 x .43 (18 x 5 x 11) 0.59 (15)	\$2.50
51522	0.10	160	5	0.7 x 0.2 x .43 (18 x 5 x 11) 0.59 (15)	\$1.95
51523	0.10	400	10	0.7 x 0.24 x 0.5 (18 x 6 x 12.5) 0.59 (15)	\$2.50
51524	0.10	630	10	1.25 x .43 x .83 (31.5 x 11 x 21) 1.08 (27.5)	\$2.95
54376	0.15	400	10	1.04 x .33 x .73 (26.5 x 8.5 x 18.5) 0.88 (22.5)	\$3.25
51525	0.22	400	5	1.04 x .33 x .73 (26.5 x 8.5 x 18.5) 0.88 (22.5)	\$3.75
51526	0.33	400	5	1.04 x .43 x .83 (26.5 x 11 x 21) 0.88 (22.5)	\$3.85
51527	0.47	250	10	1.04 x .33 x .73 (26.5 x 8.5 x 18.5) 0.88 (22.5)	\$3.50
51528	0.47	400	5	1.25 x .43 x .83 (31.5 x 11 x 21) 1.08 (27.5)	\$3.95
54375	0.68	250	10	1.04 x .43 x .83 (26.5 x 11 x 21) 0.88 (22.5)	\$3.50
51529	1.0	400	5	1.25 x .67 x 1.2 (31.5 x 17 x 29.5) 1.08 (27.5)	\$4.50

Wima FKP-1 – Polypropylene Film & Aluminum Foil (Radial leads)

SKU#	Value µF	DCVolts	Tol %	Dimensions in. (mm) L x W x H	Price \$US
Lead Spacing					
51530	0.1	630	5	1.25 x .51 x .94 31.5 x 13 x 24) 1.08 (27.5)	\$3.50

INFINICAP®



TRT (Tomorrow's Research Today), makers of the now infamous WonderCap™, and the more recent InfiniCap, have now evolved their product line into two distinct series - InfiniCap SETI and InfiniCap Signature. We'll let the folks at TRT toot their own horn for a moment about their excellent products....

This is a capacitor breakthrough so dramatic that it leaves other capacitors far behind in the dust - including premium multiple caps and our own WonderCap™. Sonically, InfiniCap is in a whole different world from any other capacitor, especially in sheer transparency, transient speed, precise (not fussy) focus, clean purity, coherent transient attack, tight bass kick, dynamic punch, subtle inner detail, natural musicality.

You won't believe it until you hear it. You might not even believe it after you hear it. No capacitor could sound so superior to all other capacitors. But InfiniCap does.

What makes the InfiniCap capacitor? InfiniCap is wound as a continuous rolled up spiral, which can have about 1000 turns. The spiral turns are nearly circular, and they are all coaxial around one another. InfiniCap's unique design (patents pending) connects in parallel all the points around each turn, for all 1000 turns of the capacitor spiral, via metal ends.

Note that each spiral turn has an infinite number of points around its circle; InfiniCap's metal ends connect all of these points in parallel. There can be 1000 such spiral turns, all coaxial and also connected in parallel. So InfiniCap's metal ends connect every point on every turn in parallel with every point on the same turn, and in parallel with every point on every other turn.

The effective result is an infinity of capacitors in parallel!

SETI Series: The Single Ended Triode InfiniCap gets its name from its natural liquid sound, a characteristic commonly ascribed to single ended triode amps.

Signature Series: The new Signature Series combines staggering transparency with exquisite musical naturalness. The signature series sounds even better than Teflon or Oil-filled caps, for far less money! While we previously only offered these in .01µf and .033µf versions, our research has now succeeded in extending the magic of the Signature design principles to a full line-up of capacitance values. Available as well in both "D" and "S" types.

Now that you are ready to buy some of these great caps, which Type "D", or "S", do you prefer? Well, InfiniCap is so technically advanced that they can tailor its construction to be ideal for different applications.

"S" Type: Delivers a "single-ended" tube type sound which make them ideal to complement solid state electronics & hard dome tweeters. They have more polite midrange, a sweet gentleness and refined delicacy ideal for classical music. It is also more musically forgiving of any weaknesses in the program material or in the playback system. These caps are constructed with a thin end coat to seal in special "S" type ingredients inside.

"D" Type: The D stands for DIRECT. These are engineered to sound like a straight wire bypass. This will offer a more forward midrange, a dynamic punch ideal for pop music. It maximizes clarity! Offered with bare metal ends.

Installation and Application Notes:

InfiniCaps usually sound best when you connect the left side of the printed label as the signal input end (for series applications), as the hot signal side (for parallel applications), or as the plus voltage end (when there is a biasing voltage like B+). This orientation gives the maximum articulation, transient coherence, and clarity from each InfiniCap. Reversing this orientation generally gives a softer, gentler sound, which is more forgiving. Feel free to experiment with both orientations.

InfiniCap's unique metal ends, on each end of the cylindrical capacitor, are just as live with electricity as the wire lead on each end is. Therefore please be careful not to touch the ends of the caps or as always, the leads of the caps to any other surrounding parts, including your own body parts! You may get zapped!

Please note that we offer ALL our InfiniCaps in the sonically superior, but physically more delicate, Hotrod version which has a thin outer wrap, and exposed metal ends. For OEMs who require a more rugged package for higher volume assembly, we can special order the R (heavy plastic wrap) and TR (heavy plastic wrap and thick end fill) types at an extra \$1 and \$2 per cap premium respectively.

InfiniCap - SETI Series (Metallized Polypropylene)

µf	DC Volts	Tolerance	Dimensions. (Approx)	SETI - "D" type	SETI - "S" type		
				SKU#	Price \$US	SKU#	Price \$US
0.01 ⁽¹⁾	630V	10%	0.33" D x 0.85" L	57207	\$6.50	58932	\$7.50
0.10	450V	10%	0.25" D x 1.05" L	57208	\$5.95	58917	\$6.95
0.22	630V	10%	0.50" D x 1.55" L	57209	\$8.75	58918	\$9.75
0.33	425V	10%	0.40" D x 1.55" L	57210	\$6.95	58919	\$7.95
0.47	425V	10%	0.46" D x 1.55" L	57211	\$7.75	58920	\$8.75
0.68	425V	10%	0.57" D x 1.55" L	57212	\$9.50	58921	\$10.50
1.00	425V	10%	0.70" D x 1.55" L	57213	\$10.50	58922	\$11.50
2.00	425V	10%	0.94" D x 1.55" L	57214	\$13.95	58923	\$14.95
3.00	425V	10%	1.10" D x 1.55" L	57215	\$18.50	58924	\$19.50
4.00	425V	10%	1.33" D x 1.55" L	57216	\$19.95	58925	\$20.95
5.00	310V	10%	1.02" D x 1.55" L	57217	\$18.75	58926	\$19.75
6.00	310V	10%	1.10" D x 1.55" L	57218	\$20.25	58927	\$21.25
8.00	310V	10%	1.28" D x 1.55" L	57219	\$24.50	58928	\$25.50
10.00	310V	10%	1.47" D x 1.55" L	57220	\$28.95	58929	\$29.95

InfiniCap - Signature Series (Metallized Polypropylene)

µf	DC Volts	Tolerance	Dimensions (Approx.)	Signature - "D" type	Signature - "S" type		
				SKU#	Price \$US	SKU#	Price \$US
0.01 ⁽¹⁾	630V	10%	0.33" D x 0.85" L	58948	\$8.50	58949	\$9.50
0.033	630V	10%	0.43" D x 0.75" L	58934	\$12.95	58950	\$13.95
0.10	425V	10%	0.25" D x 1.05" L	58933	\$7.95	58951	\$8.95
0.22	630V	10%	0.50" D x 1.55" L	58935	\$10.95	58952	\$11.95
0.33	425V	10%	0.40" D x 1.55" L	58936	\$8.95	58953	\$9.95
0.47	425V	10%	0.46" D x 1.55" L	58937	\$9.95	58954	\$10.95
0.68	425V	10%	0.57" D x 1.55" L	58938	\$11.95	58955	\$12.95
1.00	425V	10%	0.70" D x 1.55" L	58939	\$13.95	58956	\$14.95
2.00	425V	10%	0.94" D x 1.55" L	58940	\$17.95	58957	\$18.95
3.00	425V	10%	1.10" D x 1.55" L	58941	\$22.95	58958	\$23.95
4.00	425V	10%	1.33" D x 1.55" L	58942	\$25.95	58959	\$26.95
5.00	310V	10%	1.02" D x 1.55" L	58943	\$23.95	58960	\$24.95
6.00	310V	10%	1.10" D x 1.55" L	58944	\$25.95	58961	\$26.95
7.00	310V	10%	1.20" D x 1.55" L	58945	\$28.95	58962	\$29.95
8.00	310V	10%	1.28" D x 1.55" L	58946	\$31.95	58963	\$32.95
10.00	310V	10%	1.47" D x 1.55" L	58947	\$36.95	58964	\$37.95

(1) - Polystyrene

CAPACITORS

SOLEN FAST CAPS



The Solen Fast Cap line of metallized polypropylene capacitors have been very popular for a wide variety of applications. A standard choice for use in loudspeaker crossovers, they are also excellent for use in tubed equipment power supplies both as by-pass caps for electrolytics, and to replace electrolytics for the ultimate all polypropylene power supply. Where size or cost is a major factor, they are also an excellent choice as coupling capacitors in the signal path. We have greatly expanded our range of Solen Fast Caps, both in the 630 volt PPE series, and the 400 volt PB series. We have also added three values of custom, radial lead power supply caps in aluminum cans to make your all polypropylene power supply look as good as it sounds!

Solen Fast Cap – Metallized Polypropylene PPE Series 630V 5% Tol. (Tinned Copper Axial Leads)

SKU#	Value μ f (+-5%)	DF	Dimensions in. (mm) D x L	Price \$US
51541	0.10	0.0001	0.35 x 0.67 (9 x 17)	\$1.75
55858	0.15	0.0001	0.35 x 0.79 (9 x 20)	\$1.80
55859	0.18	0.0001	0.39 x 0.79 (10 x 20)	\$1.80
51542	0.22	0.0001	0.43 x 0.79 (11 x 20)	\$1.85
55860	0.27	0.0001	0.43 x 0.87 (11 x 22)	\$1.90
51543	0.33	0.0001	0.47 x 0.87 (12 x 22)	\$1.90
55861	0.39	0.0001	0.47 x 0.87 (12 x 22)	\$1.95
51544	0.47	0.0001	0.51 x 0.87 (13 x 22)	\$1.95
51545	0.56	0.0001	0.55 x 0.87 (14 x 22)	\$2.00
51546	0.68	0.0001	0.60 x 0.87 (15 x 22)	\$2.10
52318	0.82	0.0001	0.60 x 1.0 (15 X 25)	\$2.25
55862	1.0	0.0001	0.63 X 1.0 (16 X 25)	\$2.35
55863	1.5	0.0001	0.71 X 1.1 (18 X 27)	\$2.70
55439	2.2	0.0001	0.75 x 1.3 (19 x 33)	\$2.95
55865	3.3	0.0002	0.95 x 1.3 (24 x 33)	\$3.40
55866	4.7	0.0002	1.0 x 1.5 (25 x 38)	\$4.10
51606	5.1	0.0002	1.0 x 1.5 (26 x 38)	\$4.25
55867	6.8	0.0003	1.2 x 1.5 (30 x 38)	\$4.95
55868	8.2	0.0003	1.2 x 1.8 (30 x 45)	\$5.85
55869	10.0	0.0003	1.3 x 1.8 (32 x 45)	\$6.55
51608	15.0	0.0004	1.4 x 2.1 (36 x 53)	\$8.50
55870	22.0	0.0005	1.6 x 2.3 (42 x 58)	\$11.34
54968	33.0	0.0006	1.9 x 2.5 (49 x 63)	\$15.25
52319	39.0	0.0007	2.1 x 2.5 (53 x 63)	\$17.35
55872	47.0	0.0008	2.1 x 2.8 (54 x 72)	\$20.20

Solen Fast Cap – Metallized Polypropylene PB Series 400V 5% Tol. (Tinned Copper Axial Leads)

SKU#	Value μ f (+-5%)	DF	Dimensions in. (mm) D x L	Price \$US
51547	1.0	0.0001	0.50 x 0.90 (13 x 23)	\$2.10
55873	1.2	0.0001	0.60 x 0.90 (15 x 23)	\$2.20
55874	1.5	0.0001	0.55 x 1.0 (14 x 25)	\$2.35
55875	2.0	0.0001	0.67 x 1.0 (17 x 25)	\$2.60
51548	2.2	0.0001	0.63 x 1.1 (16 x 28)	\$2.70
55876	2.7	0.0001	0.71 x 1.1 (18 x 28)	\$2.75
55878	3.0	0.0001	0.75 x 1.1 (19 x 28)	\$2.90
51549	3.3	0.0002	0.78 x 1.1 (20 x 28)	\$3.00
55879	3.9	0.0002	0.71 x 1.3 (18 x 33)	\$3.25
51550	4.7	0.0002	0.75 x 1.3 (19 x 33)	\$3.35
51551	5.1	0.0002	0.83 x 1.3 (21 x 33)	\$3.70

Solen Fast Cap – Metallized Polypropylene PB Series (con't) 400V 5% Tol. (Tinned Copper Axial Leads)

SKU#	Value μ f (+-5%)	DF	Dimensions in. (mm) D x L	Price \$US
55880	5.6	0.0002	0.87 x 1.3 (22 x 33)	\$3.90
51552	6.2	0.0002	0.90 x 1.3 (23 x 33)	\$4.00
51607	6.8	0.0003	0.95 x 1.3 (24 x 33)	\$4.30
51553	7.5	0.0003	1.0 x 1.3 (26 x 33)	\$5.05
51554	8.2	0.0003	0.95 x 1.5 (24 x 38)	\$5.30
55882	9.1	0.0003	1.0 x 1.5 (25 x 38)	\$5.75
51555	10.0	0.0003	1.0 x 1.5 (26 x 38)	\$5.85
51556	12.0	0.0004	1.1 x 1.5 (28 x 38)	\$6.65
51557	15.0	0.0004	1.1 x 1.8 (28 x 45)	\$7.50
51558	20.0	0.0004	1.3 x 1.8 (32 x 45)	\$9.15
55710	22.0	0.0004	1.3 x 1.8 (32 x 45)	\$10.05
55885	27.0	0.0005	1.3 x 2.1 (34 x 53)	\$11.95
51559	30.0	0.0006	1.4 x 2.1 (36 x 53)	\$13.05
51609	33.0	0.0006	1.5 x 2.1 (38 x 53)	\$14.05
51560	39.0	0.0007	1.5 x 2.3 (39 x 58)	\$15.65
51561	47.0	0.0008	1.7 x 2.3 (44 x 58)	\$18.64
51562	51.0	0.0009	1.8 x 2.3 (45 x 58)	\$19.30
51563	56.0	0.0009	1.8 x 2.3 (45 x 58)	\$20.65
51564	62.0	0.001	1.9 x 2.5 (47 x 63)	\$22.70
51565	68.0	0.001	1.9 x 2.5 (49 x 63)	\$24.15
51566	75.0	0.001	2.0 x 2.5 (51 x 63)	\$26.07
51567	82.0	0.001	2.1 x 2.5 (54 x 63)	\$28.30
51568	91.0	0.001	2.2 x 2.5 (57 x 63)	\$30.50
51569	100.0	0.001	2.3 x 2.5 (59 x 63)	\$37.00
51570	120.0	0.001	2.3 x 2.8 (59 x 72)	\$42.00
51571	130.0	0.001	2.3 x 3.3 (59 x 85)	\$45.50
51572	150.0	0.002	2.4 x 3.3 (61 x 85)	\$49.00

SOLEN FAST CAP Metallized Polypropylene Custom Radial Can Caps



The Parts Connection has had these metallized polypropylene radial aluminum can capacitors custom made for us by Solen. Perfect for power supply applications in lower powered amplifiers when used with a choke as a Pi type filter, they feature a 0.015" (0.4mm) thick drawn aluminum can case with 1/2" (12mm) terminals

Solen Fast Cap Metallized Polypropylene Custom Radial Can Caps

SKU#	Value μ f (+-5%)	DC Volts	Dimensions in. (mm) D x L	Price \$US
55988	51.0	1.5 KV	2.2 x 4.5 (55 x 114)	\$52.50
55983	100.0	630	2.5 x 4.5 (64 x 114)	\$45.00
55984	51.0	630	2.0 x 3.5 (20 x 89)	\$32.00

MUSICAP® BY HOVLAND

Hovland Musicaps, do you know it as a common household name yet? Well, at the rate they are appearing in so many flagship speaker lines, of so many high-end speaker manufacturers and electronic audio equipment, it won't be long.

"Without altering the overall timbral balance, the Hovland [Musicap] expands the harmonic envelope and presents much improved low level retrieval, resulting in better rendering of venue."

Bob Shedlock, LISTENER MAGAZINE, Winter 1998a

"After auditioning a wide variety of caps, I find these film-and-foil capacitors to be the most musical performers—and by a large margin. The MusiCap specializes in textural liquidity (lack of grain) and delicacy of treble nuances."

**Dick Olsher,
Reviewer and Designer for Samadhi Acoustics,
Nov. 1996 white paper**

The MusiCap lines of both coupling caps and speaker caps are all a film and foil polypropylene design. Film and foil capacitors are well known for their advantages over metallized designs in their lower ESR, improved detail and resolution, and

improved sense of spaciousness and imaging. These advantages are there in spades with the MusiCap lines. Their speed, dynamics, resolution, and detail are on a par with any premium line of film and foil capacitor, but they also present a sense of ease, listenability, correctness of timbre, and wholeness of the entire musical spectrum that gives them a very neutral (and excellent) character.

The winding techniques used in the manufacture of MusiCaps (individually machine rolled) give them a very consistent, solid construction that helps to dampen microphonics. The hand soldered wire leads (22Ga. stranded silver plated copper, teflon insulated leads on the coupling caps, and 16Ga. stranded silver plated copper on the speaker caps) not only improve sonics compared to tin plated solid core copper leads, but also make them easier to install. Their design and stringent quality control (100% pre-testing) also results in a remarkable value-to-value sonic consistency.

While the large size of the MusiCaps require some thought into circuit layout both for component upgrades and complete DIY projects, their sonic performance is well worth the effort!

Hovland MusiCap® - Coupling Capacitor



These capacitors are even polarity identified with red and green leads (No more guess work as to its polarity!). The red lead is the inner edge of the foil, therefore, it is always to be connected to the lower DC potential, or the O/P side of the cap, depending on your intended application.

Film & Foil Polypropylene Coupling Capacitors (22ga. silver plated copper teflon insulated axial leads, cylindrical)

SKU #	µf	DCVolts	Tolerance	Dimensions (Approx)	Price \$US
51689	0.01	1600	5%	0.39"D x 1.17"L	\$9.70
51690	0.022	1000	5%	0.44"D x 1.25"L	\$9.59
55978	0.033	600	5%	0.35"D x 1.28"L	\$7.86
51691	0.047	1000	5%	0.54"D x 1.75"L	\$11.36
55979	0.10	400	5%	0.41"D x 1.28"L	\$8.33
51692	0.10	600	5%	0.50"D x 1.75"L	\$11.10
51693	0.15	400	5%	0.43"D x 1.25"L	\$10.73
55980	0.22	400	5%	0.41"D x 1.28"L	\$11.28
51694	0.22	600	5%	0.62"D x 2.00"L	\$13.98
51695	0.33	600	5%	0.57"D x 2.25"L	\$17.79
51696	0.47	400	5%	0.59"D x 2.00"L	\$12.01
51697	0.47	600	5%	0.80"D x 2.50"L	\$20.62
57262	0.68	400	5%	0.76"D x 2.00"L	\$16.62
58903	1.0	200v	5%	0.68"D x 2.00"L	\$15.65
51698	1.0	400	5%	0.78"D x 2.50"L	\$21.48
51699	1.5	100	5%	0.70"D x 2.00"L	\$14.92
55271	2.0	400	5%	0.98"D x 3.00"L	\$26.94
51700	2.2	100	5%	0.75"D x 2.25"L	\$18.56
51701	2.2	200	5%	0.80"D x 2.88"L	\$22.57
51702	3.0	200	5%	0.92"D x 2.88"L	\$26.69
58904	4.0	200v	5%	1.06"D x 3.00"L	\$29.54
51703	4.7	100	5%	0.95"D x 2.75"L	\$26.94
58905	5.0	200v	5%	1.10"D x 3.36"L	\$31.48

Hovland MusiCap® - Speaker Capacitor



These capacitors are also polarity identified. This time with a stripped lead. Like the coupling caps, this lead is the inner edge of the foil, therefore, it is always to be connected to the lower DC potential, or the O/P side of the cap, again depending on your intended application.

Film & Foil Polypropylene Speaker Capacitors (16ga. silver plated copper high-current axial leads, cylindrical)

SKU #	µf	DCVolts	Tolerance	Dimensions (Approx)	Price \$US
51704	1.0	100	5%	0.55"D x 2.00"L	\$16.38
51705	1.5	100	5%	0.70"D x 2.00"L	\$19.56
51706	1.8	100	5%	0.66"D x 2.25"L	\$20.03
51707	2.0	100	5%	0.70"D x 2.25"L	\$22.27
51708	2.2	100	5%	0.75"D x 2.25"L	\$23.09
51709	2.7	100	5%	0.80"D x 2.25"L	\$23.68
51710	2.7	200	5%	0.87"D x 2.88"L	\$30.51
56485	3.0	100	5%	0.75"D x 2.83"L	\$24.04
51711	3.0	200	5%	0.92"D x 2.88"L	\$30.98
51712	3.3	100	5%	0.66"D x 2.88"L	\$24.39
51713	4.0	100	5%	0.85"D x 2.88"L	\$27.45
51714	5.0	100	5%	0.95"D x 2.88"L	\$30.31
51715	6.0	100	5%	0.94"D x 3.25"L	\$32.51
51716	7.0	100	5%	1.05"D x 3.25"L	\$37.25
51717	8.0	100	5%	1.10"D x 3.25"L	\$39.42
51718	9.0	100	5%	1.10"D x 3.25"L	\$42.68
51719	10.0	100	5%	1.35"D x 3.25"L	\$46.70

CAPACITORS

MICONICS SILVER MICA

By popular demand, we are now stocking these silver mica small value capacitors. All are radial lead, 5% tolerance, except 1-10pF, which are $\pm 0.5\text{pF}$.

All valves 500VDC rating.

Miconics Silver Mica (Radial leads)

SKU#	Value pF	SKU#	Value pF	SKU #	Value pF	Price \$US
54382	1	54383	2	54384	5	
54385	6	54386	7	54387	8	
54388	10	54389	12	54390	15	
54391	18	54392	20	54393	22	
54394	24	54395	27	54396	30	
54397	33	54398	36	54399	39	
54400	43	54401	47	54402	50	
54403	51	54404	62	54405	68	
54406	75	54407	82	54408	91	
54409	100					\$0.60
54410	110	54411	120	54412	130	
54413	150	54414	160	54415	180	
54416	200	54417	220	54418	240	
54419	250	54420	270	54421	300	\$0.75
54422	330	54423	360	54424	390	
54425	430	54426	470	54427	510	
54428	510	54429	560	54430	620	
						\$1.00
54431	680	54432	750	54433	820	
54434	910					\$1.50
54435	1000	54436	1800	54437	2200	\$2.10

PAPER-IN-OIL



ENSEN PAPER-IN-OIL CAPACITORS

Yes! They're here! Paper-in oil foil capacitors. Three flavours of foil: aluminum, tin, or copper. A/S Tobias Jensen has been making capacitors for over 50 years, so they must be doing something right. Used by Audio Note and Balanced Audio Technologies, these capacitors add an incredible sense of harmonic richness whenever they are used directly in the signal path. Paper-in-oil capacitors have long been an integral part of the magic performance of single-ended amplifiers, however, you too can discover some of the "single-ended" magic. Simply swap a standard film-type capacitor for a paper-in-oil capacitor, especially where coupling capacitors are used in push-pull tube amps. This is an excellent way to ameliorate any residual harshness, especially when using digital sources. Be forewarned, however, that for those audio-technophiles in pursuit of ultimate analytical resolving power, that these capacitors can be too warm and fuzzy, drawing attention away from the stereo system, and to the music itself.

Jensen Aluminum Foil

SKU#	μF	Voltage	Tolerance	Dimensions	Price \$US
58609	0.01 μF	1000V	-10/20%	0.4" X 0.9"	\$14.50
58610	0.022 μF	1000V	-10/20%	0.4" X 1.3"	\$16.00
58612	0.047 μF	1000V	-10/20%	0.5" X 1.3"	\$17.00
58613	0.1 μF	1000V	-10/20%	0.6" X 1.7"	\$18.50
58614	0.15 μF	1000V	-10/20%	0.7" X 1.7"	\$19.00
58615	0.22 μF	1000V	-10/20%	0.9" X 1.8"	\$20.00
58616	0.33 μF	1000V	-10/20%	1.0" X 2"	\$20.50
58617	0.47 μF	1000V	-10/20%	1.0" X 2.8"	\$22.50
58618	1.0 μF	1000V	-10/20%	1.4" X 2.8"	\$27.50

Jensen Copper Foil

SKU#	μF	Voltage	Tolerance	Dimensions	Price \$US
58619	0.01 μF	1000V	-10/20%	0.5" X 1.1"	\$19.50
58520	0.022 μF	1000V	-10/20%	0.5" X 1.4"	\$21.00
58621	0.047 μF	1000V	-10/20%	0.6" X 1.4"	\$22.00
58622	0.1 μF	1000V	-10/20%	0.9" X 1.4"	\$24.00
58623	0.22 μF	1000V	-10/20%	1.2" X 1.4"	\$26.50
58624	0.47 μF	1000V	-10/20%	1.2" X 2.2"	\$32.00
58625	1.0 μF	1000V	-10/20%	1.6" X 2.2"	\$39.50

Jensen Tin Foil

SKU#	μF	Voltage	Tolerance	Dimensions	Price \$US
58626	0.01 μF	630V	-10/20%	0.5" X 1.4"	\$20.50
58627	0.022 μF	630V	-10/20%	0.5" X 1.4"	\$21.00
58628	0.047 μF	630V	-10/20%	0.6" X 1.4"	\$21.50
58629	0.1 μF	630V	-10/20%	0.6" X 1.4"	\$22.00
58630	0.22 μF	630V	-10/20%	1.0" X 1.4"	\$22.50
58631	0.47 μF	630V	-10/20%	1.0" X 2"	\$23.50
58632	1.0 μF	630V	-10/20%	1.2" X 2.1"	\$25.00

ELECTROLYTIC



BLACK GATE



The capacitor with a name that sounds too much like a Stephen King novel. Maybe that explains how those magicians in Tokyo rewrote the book on electrolytic capacitors. "The finest electrolytic capacitor based on the new theory 'the Transcendence Electron Transfer'" (sic). By using very fine conductive particles of super-high-purity graphite and other gee-whiz materials, Rubycon has drastically lowered many of the distortion mechanisms inherent in electrolytic capacitors design. The direct implication - better sound. You would be amazed at the improvement effected by upgrading ordinary power-supply electrolytic capacitors to Black Gates. Be forewarned, however, that to realize the full potential of these capacitors, that upwards of 30 hours of use are required to fully activate the electrodes and reduce nonlinear distortion and phase distortion. Well worth the extra effort.

Black Gate WKZ Premium Grade High Voltage Type

SKU#	Description	Dimensions	Tolerance	Price \$US
58636	WKZ 100 / 100 μ f 350V	1.4" X 2.6"	20%	\$99.00
58637	WKZ 100 μ f 500V	1.4" X 2.6"	20%	\$94.00
58638	WKZ 100 / 100 μ f 500V	1.4" X 4.7"	20%	\$124.00
58639	WKZ 220 / 220 μ f 350V	1.4" X 3.9"	20%	\$114.00

Black Gate VK/WK Polarized Electrolytics

SKU#	Description	Dimensions	Tolerance	Price \$US
58640	VK 22 μ f 350V	0.9" X 1"	20%	\$14.50
58641	VK 150 μ f 350V	1.2" X 1"	20%	\$27.50

Black Gate Standard Polarized Electrolytics

SKU#	Description	Dimensions	Tolerance	Price \$US
58642	Black Gate 4.7 μ f 100V	0.3 X 0.4"	20%	\$2.00
58643	Black Gate 10 μ f 16V	0.2 X 0.4"	20%	\$1.75
58644	Black Gate 10 μ f 50V	0.3" X 0.4"	20%	\$2.00
58645	Black Gate 10 μ f 100V	0.3" X 0.5"	20%	\$2.50
58646	Black Gate 22 μ f 16V	0.2" X 0.4"	20%	\$1.50
58647	Black Gate 22 μ f 100V	0.2" X 0.8"	20%	\$4.00
58648	Black Gate 33 μ f 16V	0.3" X 0.4"	20%	\$2.15
58649	Black Gate 33 μ f 50V	0.4" X 0.6"	20%	\$2.45
58650	Black Gate 47 μ f 16V	0.3" X 0.4"	20%	\$2.50
58651	Black Gate 47 μ f 50V	0.4" X 0.6"	20%	\$2.70
58652	Black Gate 47 μ f 100V	0.5" X 1.0"	20%	\$6.00
58653	Black Gate 100 μ f 16V	0.4" X 0.5"	20%	\$3.00
58654	Black Gate 100 μ f 50V	0.5" X 0.8"	20%	\$4.25
58655	Black Gate 100 μ f 100V	0.6" X 1.0"	20%	\$7.00
58656	Black Gate 220 μ f 50V	0.6" X 1.0"	20%	\$6.25
58657	Black Gate 220 μ f 100V	0.7" X 1.6"	20%	\$17.50
58658	Black Gate 330 μ f 50V	0.6" X 1.2"	20%	\$7.25
58659	Black Gate 470 μ f 50V	0.6" X 1.2"	20%	\$11.25
58660	Black Gate 470 μ f 100V	0.9" X 1.7"	20%	\$37.00
58661	Black Gate 1000 μ f 50V	0.9" X 1.7"	20%	\$21.25
58662	Black Gate 4700 μ f 35V	1.6" X 1.6"	20%	\$45.50



SANYO OS-CON



Wow! Sanyo is serious about this cap! Originally designed for use in switching power supplies (things like DC to DC convertors), this capacitor line up has started to be noticed by the audiophile community. Specifically, the same type of performance characteristics that have led to the use of OS-CONs in switching power supplies, also make this capacitor an excellent upgrade for use in digital applications. Upgrading bypass electrolytic capacitors, as used to decouple digital power supplies, with OS-CON's can produce a smoother more "analog" sound. Another interesting property of the OS-CON capacitors, is that they have greater temperature stability than most normal electrolytic capacitors. Those crazy chaps over at HI-FI World magazine upgraded the digital decoupling caps in our award winning DAC-2 digital processor, and boy were they impressed! Please note, that due to the materials used in the construction of this capacitor, the OS-CON's are only available in voltage ratings up to 30V.

Sanyo: Oscon

SKU#	Description	Tolerance	Dimensions	Price \$US
58674	OS-CON SG 330 μ f 6.3V	20%	0.4" x 0.4"	\$3.95
58677	OS-CON SG 2200 μ f 6.3V	20%	0.6" X 1.0"	\$11.95
58673	OS-CON SG 220 μ f 10V	20%	0.4" X 0.4"	\$3.95
58672	OS-CON SG 150 μ f 16V	20%	0.4" X 0.4"	\$3.95
58675	OS-CON SG 470 μ f 16V	20%	0.4" X 0.9"	\$7.45
58676	OS-CON SG 1000 μ f 16V	20%	0.6" X 1.0"	\$13.45
58666	OS-CON SG 22 μ f 20V	20%	0.2" X 0.3"	\$1.95
58668	OS-CON SG 33 μ f 20V	20%	0.2" X 0.4"	\$2.65
58885	OS-CON SG 47 μ f 6.3V	20%	0.3" X 0.4"	\$1.35
58669	OS-CON SG 47 μ f 20V	20%	0.3" X 0.4"	\$3.85
58670	OS-CON SG 68 μ f 20V	20%	0.3" X 0.4"	\$4.45
58671	OS-CON SG 100 μ f 20V	20%	0.4" X 0.4"	\$4.45
58663	OS-CON SG 4.7 μ f 25V	20%	0.2" X 0.3"	\$1.10
58664	OS-CON SG 6.8 μ f 25V	20%	0.2" X 0.3"	\$1.50
58665	OS-CON SG 10 μ f 25V	20%	0.2" X 0.3"	\$1.95
58667	OS-CON SG 15 μ f 25V	20%	0.2" X 0.3"	\$2.50

CAPACITORS



NICHICON MUSE - ACOUSTIC SERIES

nichicon

Well, the folks at Nichicon don't go into as great a depth about explaining the mechanisms at work in their line of premium electrolytics. What they do say is: "Premium grade "nichicon MUSE" acoustic series. Ideally suited for first class audio equipment where qualitative and quantitative comfortableness is required." I guess that if you like your capacitors to bring you your pipe and slippers when you're getting ready to relax and do some serious audiophile type listening, then this is the capacitors for you! But seriously, nichicon really has something here. This presents you with a less expensive path than some of the other premium capacitors we offer, to discover the benefits to be had with upgrading your power supply capacitors to a premium "audio engineered" electrolytic cap.

Nichicon

SKU#	Description	Tolerance	Dimensions	Price \$US
58579	Nichicon KZ 470 μ F 50V	20%	16 X 35.5	\$ 1.45
58580	Nichicon KZ 1000 μ F 50V	20%	8 X 40	\$ 1.85
58581	Nichicon KZ 10 μ F 100V	20%	8 X 11.5	\$ 0.65
58582	Nichicon KZ 22 μ F 100V	20%	10 X 16	\$ 0.65
58583	Nichicon KZ 33 μ F 100V	20%	10 X 20	\$ 0.95
58584	Nichicon KZ 47 μ F 100V	20%	12.5 X 20	\$ 1.05
58585	Nichicon KZ 100 μ F 100V	20%	16 X 25	\$ 1.30
58586	Nichicon KZ 220 μ F 100V	20%	16 X 35.5	\$ 1.55
58587	Nichicon KZ 330 μ F 100V	20%	18 X 35.5	\$ 1.95
58588	Nichicon FG 10 μ F 63V	20%	6.3 X 11	\$ 0.50
58589	Nichicon FG 22 μ F 63V	20%	8 X 11.5	\$ 0.65
58590	Nichicon FG 33 μ F 63V	20%	8 X 11.5	\$ 0.75
58591	Nichicon FG 47 μ F 63V	20%	10 X 12.5	\$ 0.95
58592	Nichicon FG 100 μ F 63V	20%	10X 20	\$ 1.05
58593	Nichicon FG 220 μ F 63V	20%	12.5 X 20	\$ 1.15
58594	Nichicon FG 330 μ F 63V	20%	12.5 X 25	\$ 1.15
58595	Nichicon FG 470 μ F 63V	20%	16 X 25	\$ 1.70
58596	Nichicon FG 1000 μ F 63V	20%	8 X 35.5	\$ 3.50
58597	Nichicon FG 2200 μ F 63V	20%	18 X 35.5	\$ 3.50
58598	Nichicon FG 22 μ F 100V	20%	10X 12.5	\$ 0.70
58599	Nichicon FG 33 μ F 100V	20%	10 X 16	\$ 0.90
58600	Nichicon FG 47 μ F 100V	20%	10 X 20	\$ 0.95
58601	Nichicon FG 100 μ F 100V	20%	12.5 X 20	\$ 1.35
58602	Nichicon FG 220 μ F 100V	20%	16 X 25	\$ 1.80
58603	Nichicon FG 330 μ F 100V	20%	16 X 31.5	\$ 2.25
58604	Nichicon FG 470 μ F 100V	20%	18 X 35.5	\$ 3.50
58605	Nichicon KG 6800 μ F 63V	20%	40 X 80	\$ 49.00
58606	Nichicon KG 10000 μ F 63V	20%	40 X 80	\$ 59.00
58607	Nichicon KG 15000 μ F 63V	20%	40 X 100	\$ 79.00
58608	Nichicon KG 22000 μ F 63V	20%	50 X 100	\$ 94.00



ELNA CERAFINE

ELNA

Another approach to improving the performance in electrolytic capacitors is used by Elna. They introduce a super fine ceramic particle into the structure of the capacitor: " As the charging and discharging speed between the oxidized film of anode and field surface of electrolyte and the variation of potential due to unevenness of fibers of separating paper sheets are improved by the electro-chemical action of super fine ceramic particles, this product realizes high grade audio tone with excellent sound resolution power, good rise in the low-pitched sound region and no distortion in the medium and high-pitched sound region." (sic) Straight from the horse's mouth. Basically, Elna is reducing the capacitor's self-distortion through the introduction of an inert additive in the construction of the cap. Note that this is a totally different mechanism that is used in the Black Gate capacitors, however the net result is a significant improvement in sound quality, through minimizing distortion products added from electrolytic capacitors, generally used in power supplies.

Elna

SKU#	Description	Tolerance	Dimensions	Price \$US
58557	ELNA ROA 10 μ F 100V	20%	10 X 12.5	\$ 0.50
58558	ELNA ROA 22 μ F 100V	20%	10X 20	\$ 0.70
58559	ELNA ROA 47 μ F 100V	20%	12.5 X 25	\$ 1.20
58560	ELNA ROA 100 μ F 100V	20%	16 X 25	\$ 2.00
58561	ELNA ROA 220 μ F 100V	20%	18 X 40	\$ 3.00
58562	ELNA ROA 1000 μ F 35V	20%	18 X 35.5	\$ 3.20
58548	ELNA LOA 10000 μ F 50V	20%	35 X 100	\$ 19.95
58549	ELNA LOA 22000 μ F 50V	20%	51 X 100	\$ 44.95
58550	ELNA LOA 4700 μ F 63V	20%	35X 80	\$ 16.95
58551	ELNA LOA 18000 μ F 63V	20%	51 X 112	\$ 52.95
58552	ELNA LOA 4700 μ F 80V	20%	40 X 80	\$ 21.95
58553	ELNA LOA 12000 μ F 80V	20%	51 X 112	\$ 44.95
58554	ELNA LOA 2200 μ F 100V	20%	35 X 71	\$ 14.95
58555	ELNA LOA 4700 μ F 100V	20%	40 X 100	\$ 20.95
58556	ELNA LOA 10000 μ F 100V	20%	51 X 112	\$ 41.95

LCR DUAL SECTION ELECTROLYTICS

These low cost, U.K. made electrolytics are an excellent budget choice for tube power amplifier power supplies with their 500VDC! rating. Light blue in colour, they have three solder lugs and require a 1-3/8" dia. mounting clamp.

LCR Dual Section Electrolytics

SKU#	Value μ f	WVDC	Size Dia x Length in (mm)	Price \$US
54469	50 + 50	500 - 500	1.375 x 2.0 (35 x 51)	\$11.00
54471	100 + 100	500 - 500	1.375 x 4.0 (35 x 102)	\$15.00
58441	32 x 32	500		\$12.90
58842	200 x 200	500		\$27.00
58843	200	500		\$14.50
58844	500	500		\$29.50
58847	mounting bracket/clamp for above caps			\$1.30

MISCELLANEOUS ELECTROLYTIC CAPACITORS

This Mallory multi-section can cap is an excellent replacement item for those of you with leaky, or drying up, Dynaco ST-70 power supply caps.

SKU#	Description	Price \$US
53389	Mallory FP495 40-20-20-20/500V - Radial Quad Cap	\$44.00 ea

Remember good ol' Aero can capacitors, well we have one for you. These aluminum canned multi-section caps are very common in many tubed equipment power supplies.

SKU#	Description	Price \$US
58440	Aero M 20-20-20-20/475V - Radial Quad Cap	\$19.50 ea

INDUCTORS

ALPHA-CORE AIR CORE INDUCTORS



Alpha-Core Air Core Inductors

Alpha-Core, the manufacturers of the excellent Goertz line of speaker cables and interconnects, are now using the same technology in a line of foil conductor air core inductors. Alpha-Core inductors are wound using foils of 99.99% pure copper or silver with a polypropylene insulating film onto a Lexan polycarbonate tube. The Alpha-Core inductors of course offer the same benefits of other brands of foil air core inductors, with their reduced skin effect and uniform current density for less phase shift, and more ideal inductor reactance.

The benefit to the Alpha-Core inductors is their lower price, giving you the performance benefits of foil inductors for less! Additionally, we have made arrangements with Alpha-Core to provide fast 1-2 week turnaround for custom value orders. This allows you to get the exact value that you need for your loudspeaker projects, and have them in the time it takes to finish your cabinets. We are stocking most of the commonly used values. Give us a call and we can give you an exact quote on the values that you are looking for. Please note that we can also custom order SILVER foil inductors in any value, but also note that the silver foil inductors come at a price premium of 12 to 20 TIMES that of copper foil units.

Almost 95 Standard values to choose from, plus, your custom sizes!

Also included below, is the list price (\$US), for the first and last value available in the 14 AWG Silver group.

Main Characteristics

- Negligible skin effect below 100kHz
- High winding tension and vacuum fusing of faces provide high dimensional stability, effectively locking the conductors in place. Wire wound inductors, which allow relative motion of conductors due to electromagnetic forces, will exhibit FM distortion by the process of reactance modulation.
- Flat inductive reactance from 5 Hz through 50 kHz.
- No saturation distortion. Inductors contain no magnetic materials.
- Reduced power losses. Highest space factor (ratio of conductor cross section to total cross section) means lower DC resistance within comparable dimensions.
- Extremely low stored charge

Summary Information

Conductor Material: Foil of 99.99% pure copper or silver.
Conductor Dimensions: 0.003" x 1.00" - 14 AWG
0.003" x 1.63" - 12 AWG
Dielectric: 0.002" thick polypropylene film.
Leads: 0.010" x 0.321" copper or silver.
Inductance Tolerance: +/- 3%.

Alpha-Core Air Core Inductors

14 AWG SILVER

Inductance	DCR	Dia. (mm)	Price \$U.S.
.05 mH	0.024	33	\$160.42
8.5 mH	0.662	130	\$1390.87

14 AWG COPPER

SKU #	Inductance	DCR	Dia. (mm)	Wt. (Kg)	Price \$US
59052	0.05 mH	0.026	33	0.05	\$7.50
59053	0.08 mH	0.042	36	0.14	\$7.50
57195	0.11 mH	0.050	41	0.16	\$7.50
57194	0.15 mH	0.054	43	0.19	\$7.85
59054	0.20 mH	0.068	46	0.23	\$8.15
57193	0.22 mH	0.071	46	0.24	\$8.30
59055	0.27 mH	0.078	48	0.25	\$8.65
59056	0.30 mH	0.082	51	0.27	\$9.05
59057	0.33 mH	0.083	51	0.28	\$9.05
59058	0.39 mH	0.085	53	0.33	\$9.45
57192	0.47 mH	0.110	56	0.34	\$9.93
59059	0.56 mH	0.130	58	0.38	\$10.65
59060	0.68 mH	0.154	61	0.44	\$11.45
59061	0.82 mH	0.175	66	0.49	\$12.40
57191	1.00 mH	0.188	69	0.57	\$13.70
59062	1.20 mH	0.220	71	0.59	\$15.05
57190	1.50 mH	0.251	76	0.67	\$17.10
59063	1.80 mH	0.300	81	0.73	\$19.20
57189	2.20 mH	0.332	86	0.87	\$21.95
59064	2.70 mH	0.370	89	0.95	\$25.40
59065	3.30 mH	0.421	94	1.08	\$29.55
59066	3.90 mH	0.477	99	1.17	\$33.65
59067	4.70 mH	0.547	104	1.39	\$39.20
59068	5.00 mH	0.565	107	1.45	\$41.60
59069	5.60 mH	0.612	112	1.51	\$45.45
59386	6.00 mH	0.648	114	1.54	\$47.50
59070	6.50 mH	0.658	117	1.67	\$60.70
59071	7.00 mH	0.672	122	1.76	\$73.00
59072	7.50 mH	0.686	124	1.82	\$82.10
59073	8.00 mH	0.704	127	1.91	\$90.40
59074	8.50 mH	0.720	130	1.98	\$94.40



Alpha-Core

Alpha-Core Air Core Inductors cont'd

12 AWG COPPER

SKU #	Inductance	DCR	Dia. (mm)	Wt. (Kg)	Price \$US
59014	0.05 mH	0.013	36	0.20	\$11.30
59032	0.08 mH	0.027	36	0.22	\$11.30
59033	0.11 mH	0.032	38	0.29	\$11.30
59034	0.15 mH	0.034	43	0.34	\$11.70
59035	0.20 mH	0.043	46	0.41	\$12.25
57205	0.22 mH	0.045	48	0.42	\$12.45
59036	0.27 mH	0.049	51	0.45	\$12.95
59037	0.30 mH	0.052	51	0.48	\$13.55
57204	0.33 mH	0.053	53	0.52	\$13.55
59038	0.39 mH	0.060	56	0.59	\$14.20
57203	0.47 mH	0.070	58	0.62	\$15.05
59039	0.56 mH	0.083	61	0.70	\$15.95
57202	0.68 mH	0.098	64	0.77	\$17.20
59040	0.82 mH	0.110	69	0.84	\$18.65
57201	1.00 mH	0.120	71	1.03	\$20.50
55251	1.00 mH	0.120	71	1.03	\$20.50
57200	1.20 mH	0.141	74	1.06	\$22.60
57199	1.50 mH	0.160	79	1.22	\$24.50
57198	1.80 mH	0.191	84	1.27	\$28.80
57197	2.20 mH	0.211	89	1.56	\$32.95
59041	2.70 mH	0.235	94	1.73	\$38.10
57196	3.30 mH	0.268	99	1.92	\$44.30
59042	3.90 mH	0.304	104	2.05	\$50.50
59043	4.70 mH	0.348	109	2.48	\$58.80
59044	5.00 mH	0.362	112	2.55	\$63.50
59045	5.60 mH	0.392	117	2.62	\$68.15
59046	6.00 mH	0.415	119	2.83	\$69.45
59047	6.50 mH	0.422	122	3.01	\$91.10
59048	7.00 mH	0.431	127	3.06	\$109.50
59049	7.50 mH	0.440	130	3.31	\$123.20
59050	8.00 mH	0.451	132	3.37	\$135.60
59051	8.50 mH	0.462	135	3.44	\$141.60

SOLEN INC.

Solen Hepta-litz Air Cored Inductors
Perfect Lay Hexagonal Winding

Solen Inc. was the first inductor design company to introduce inductors made with Hepta-Litz conductor. Most of the time, until now, only one parameter was considered for designing crossover network inductors and that is d. c. winding resistance. The problem is that music is far from being d. c. and other non linear losses arise from a. c. frequency which can increase the a. c. winding resistance many times the d. c. value, even at audio frequency. Let us consider some of those losses.

As the frequency increase, additional power losses occur in the winding due to eddy currents in the conductors and by the magnetic fields within the winding. In the design of inductors both skin effect and proximity effect need to be considered. Both effects depend on the ratio of the conductor diameter to the penetration depth of the electrons.

Skin Effect

Skin effect is the tendency for the alternating current to flow near the surface of the conductor as the frequency increase. It is due to eddy currents in the conductor which arise from the alternating magnetic field associated with the current in the conductor itself.

Proximity Effect

Proximity effect is the tendency for the alternating current to flow and return along the length of each conductor within the winding in such a way as to oppose the magnetic field of the winding as the frequency increase. It is due to the eddy currents in the conductor which arise from the alternating magnetic field interaction of the other conductors within the winding.

Litz Conductor

In order to minimize those losses, we have to replace the solid conductor with a number of separately insulated smaller conductors twisted together, the Litz conductor. The reduction of the conductor diameter along with the increase in the number of twisted insulated conductors which tends to occupy all possible positions in the cross section of the resulting conductor are very effective in reducing both effects. The smaller insulated conductors makes the current to divide uniformly between them thus reducing the skin effect losses. The twist of the smaller insulated conductors cancels the emf's induced by the traverse magnetic field thus reducing the proximity effect losses.

This design concept, Hepta-Litz which consist of 7 twisted insulated conductors, results in equalizing the a. c. resistance to d. c. resistance ratio in the usable audio frequency band which is establishing new standards in inductor quality. The Hepta-Litz Air Cored Inductors Perfect Layer Hexagonal Winding are a clean slate design, based on proven state-of-the-art technology which we have successfully transferred and merged to achieve superiority on all fronts. They will dramatically improve the performance of any loudspeaker by linearizing the inductor reactance curve to the ideal inductor reactance.

General Information

Conductor: Enamelled Pure Copper Seven Twisted Conductors.
Winding: Perfect Layer Hexagonal Self-Supporting Type.
Dielectric: Polyurethane Polyamide Enamel.
Leads: Pure Copper.

Feature

Ultra Linear AC Resistance.
Linear Phase Angle between Current and Voltage.
Linear and Stable High Frequency Characteristics.
Very Low Magnetostriction Distortion.
Constant Inductance with Voltage Variation.
Constant Inductance with Current Variation.
No Saturation Distortion.

Electrical Performance

Very High Quality Factor.
Very Low Skin Effect Losses.
Very Low Proximity Effect Losses.
Low A.C. Resistance.
Low D.C. resistance.
Low Self Capacitance.

Almost 200 Standard values to choose from, plus custom sizes!

Please note below that we are showing you the range of values available for each inductor gauge group.

Simply call The Parts Connection for the quote on the value of the inductor that you require.

Also included for your convenience is the list price (\$US), for the first and last value available in each conductor gauge group.

INDUCTORS

Solen Hepta-litz Air Cored Inductors



12 AWG COPPER

SKU #	Inductance	DCR (Ohms)	Dia. (mm)	Price \$US
59230	0.33 mH	0.1	19 x 38 x 76	\$18.40
59231	0.36 mH	0.11	19 x 38 x 76	\$19.40
59232	0.39 mH	0.12	19 x 38 x 76	\$20.35
59233	0.43 mH	0.12	19 x 38 x 76	\$21.55
59234	0.47 mH	0.13	19 x 38 x 76	\$21.70
59235	0.51 mH	0.14	19 x 38 x 76	\$22.75
59236	0.56 mH	0.15	19 x 38 x 76	\$24.10
59237	0.62 mH	0.16	19 x 38 x 76	\$25.55
59238	0.68 mH	0.17	22 x 45 x 89	\$25.70
59239	0.75 mH	0.18	22 x 45 x 89	\$27.35
59240	0.82 mH	0.19	22 x 45 x 89	\$28.75
59241	0.91 mH	0.2	22 x 45 x 89	\$30.60
59242	1.0 mH	0.21	22 x 45 x 89	\$32.50
59243	1.1 mH	0.23	22 x 45 x 89	\$32.65
59244	1.2 mH	0.24	22 x 45 x 89	\$34.40
59245	1.3 mH	0.26	22 x 45 x 89	\$36.10
59246	1.5 mH	0.28	22 x 45 x 89	\$37.55
59247	1.6 mH	0.29	25 x 51 x 102	\$39.00
59248	1.8 mH	0.3	25 x 51 x 102	\$41.80
59249	2.0 mH	0.31	25 x 51 x 102	\$44.60
59250	2.2 mH	0.33	25 x 51 x 102	\$47.15
59251	2.4 mH	0.36	25 x 51 x 102	\$47.35
59252	2.7 mH	0.39	25 x 51 x 102	\$50.90
59253	3.0 mH	0.42	25 x 51 x 102	\$54.15
59254	3.3 mH	0.45	32 x 64 x 127	\$54.65
59255	3.6 mH	0.47	32 x 64 x 127	\$57.55
59256	3.9 mH	0.49	32 x 64 x 127	\$60.35
59257	4.3 mH	0.52	32 x 64 x 127	\$64.00
59258	4.7 mH	0.56	32 x 64 x 127	\$64.30
59259	5.1 mH	0.59	32 x 64 x 127	\$67.55
59260	5.6 mH	0.63	32 x 64 x 127	\$71.40
59261	6.2 mH	0.67	32 x 64 x 127	\$75.95
59262	6.8 mH	0.71	38 x 76 x 152	\$76.35
59263	7.5 mH	0.75	38 x 76 x 152	\$81.05
59264	8.2 mH	0.79	38 x 76 x 152	\$85.50
59265	9.1 mH	0.83	38 x 76 x 152	\$91.05
59266	10 mH	0.87	38 x 76 x 152	\$96.35
59267	11 mH	0.96	38 x 76 x 152	\$97.10
59268	12 mH	1.03	38 x 76 x 152	\$102.30
59269	13 mH	1.11	38 x 76 x 152	\$107.35
59270	15 mH	1.17	38 x 76 x 152	\$111.60
59271	16 mH	1.24	45 x 89 x 178	\$115.80
59272	18 mH	1.29	45 x 89 x 178	\$124.30
59273	20 mH	1.35	45 x 89 x 178	\$132.40
59274	22 mH	1.44	45 x 89 x 178	\$140.15
59275	24 mH	1.53	45 x 89 x 178	\$140.70
59276	27 mH	1.62	45 x 89 x 178	\$151.00
59277	30 mH	1.71	45 x 89 x 178	\$160.85

Solen Hepta-litz Air Cored Inductors



14 AWG COPPER

SKU #	Inductance	DCR (Ohms)	Dia. (mm)	Price \$US
59278	0.16 mH	0.11	14 x 29 x 57	\$8.25
59279	0.18 mH	0.11	14 x 29 x 57	\$8.80
59280	0.20 mH	0.12	14 x 29 x 57	\$9.45
59281	0.22 mH	0.13	14 x 29 x 57	\$10.00
59282	0.24 mH	0.14	14 x 29 x 57	\$10.05
59283	0.27 mH	0.15	14 x 29 x 57	\$10.75
59284	0.30 mH	0.16	14 x 29 x 57	\$11.45
59285	0.33 mH	0.16	16 x 32 x 64	\$11.60
59286	0.36 mH	0.17	16 x 32 x 64	\$12.15
59287	0.39 mH	0.18	16 x 32 x 64	\$12.80
59288	0.43 mH	0.19	16 x 32 x 64	\$13.55
59289	0.47 mH	0.21	16 x 32 x 64	\$13.65
59290	0.51 mH	0.22	16 x 32 x 64	\$14.35
59291	0.56 mH	0.23	16 x 32 x 64	\$15.15
59292	0.62 mH	0.24	16 x 32 x 64	\$16.10
59293	0.68 mH	0.25	19 x 38 x 76	\$16.15
59294	0.75 mH	0.27	19 x 38 x 76	\$17.20
59295	0.82 mH	0.28	19 x 38 x 76	\$18.10
59296	0.91 mH	0.3	19 x 38 x 76	\$19.25
59297	1.0 mH	0.31	19 x 38 x 76	\$20.45
59298	1.1 mH	0.33	19 x 38 x 76	\$20.55
59299	1.2 mH	0.35	19 x 38 x 76	\$21.70
59300	1.3 mH	0.38	19 x 38 x 76	\$22.70
59301	1.5 mH	0.41	19 x 38 x 76	\$23.60
59302	1.6 mH	0.44	22 x 45 x 89	\$24.50
59303	1.8 mH	0.46	22 x 45 x 89	\$26.30
59304	2.0 mH	0.48	22 x 45 x 89	\$28.05
59305	2.2 mH	0.52	22 x 45 x 89	\$29.70
59306	2.4 mH	0.56	22 x 45 x 89	\$29.80
59307	2.7 mH	0.6	22 x 45 x 89	\$32.00
59308	3.0 mH	0.63	22 x 45 x 89	\$34.05
59309	3.3 mH	0.66	25 x 51 x 102	\$34.40
59310	3.6 mH	0.7	25 x 51 x 102	\$36.15
59311	3.9 mH	0.73	25 x 51 x 102	\$38.00
59312	4.3 mH	0.77	25 x 51 x 102	\$40.25
59313	4.7 mH	0.82	25 x 51 x 102	\$40.45
59314	5.1 mH	0.86	25 x 51 x 102	\$42.50
59315	5.6 mH	0.91	25 x 51 x 102	\$44.90
59316	6.2 mH	0.96	32 x 64 x 127	\$47.75
59317	6.8 mH	1.01	32 x 64 x 127	\$48.05
59318	7.5 mH	1.07	32 x 64 x 127	\$50.95
59319	8.2 mH	1.12	32 x 64 x 127	\$53.75
59320	9.1 mH	1.18	32 x 64 x 127	\$57.30
59321	10 mH	1.24	32 x 64 x 127	\$60.60
59322	11 mH	1.38	32 x 64 x 127	\$61.10
59323	12 mH	1.52	32 x 64 x 127	\$64.30
59324	13 mH	1.66	32 x 64 x 127	\$67.50
59325	15 mH	1.7	32 x 64 x 127	\$70.15
59326	16 mH	1.79	38 x 76 x 152	\$72.80
59327	18 mH	1.88	38 x 76 x 152	\$78.15
59328	20 mH	1.97	38 x 76 x 152	\$83.30
59329	22 mH	2.07	38 x 76 x 152	\$88.15
59330	24 mH	2.17	38 x 76 x 152	\$88.50
59331	27 mH	2.27	38 x 76 x 152	\$94.95
59332	30 mH	2.37	38 x 76 x 152	\$101.10

Solen Hepta-litz Air Cored Inductors



16 AWG COPPER

SKU #	Inductance	DCR (Ohms)	Dia. (mm)	Price \$US
59333	0.10 mH	0.12	11 x 22 x 45	\$4.10
59334	0.11 mH	0.13	11 x 22 x 45	\$4.30
59335	0.12 mH	0.14	11 x 22 x 45	\$4.50
59336	0.13 mH	0.15	11 x 22 x 45	\$4.70
59337	0.15 mH	0.16	11 x 22 x 45	\$4.90
59338	0.16 mH	0.16	13 x 25 x 51	\$5.10
59339	0.18 mH	0.17	13 x 25 x 51	\$5.45
59340	0.20 mH	0.18	13 x 25 x 51	\$5.85
59341	0.22 mH	0.19	13 x 25 x 51	\$6.15
59342	0.24 mH	0.21	13 x 25 x 51	\$6.20
59343	0.27 mH	0.22	13 x 25 x 51	\$6.60
59344	0.30 mH	0.24	13 x 25 x 51	\$7.05
59345	0.33 mH	0.26	14 x 29 x 57	\$7.15
59346	0.36 mH	0.27	14 x 29 x 57	\$7.50
59347	0.39 mH	0.28	14 x 29 x 57	\$7.90
59348	0.43 mH	0.29	14 x 29 x 57	\$8.15
59349	0.47 mH	0.31	14 x 29 x 57	\$8.40
59350	0.51 mH	0.33	14 x 29 x 57	\$8.80
59351	0.56 mH	0.35	14 x 29 x 57	\$9.35
59352	0.62 mH	0.36	14 x 29 x 57	\$9.90
59353	0.68 mH	0.38	16 x 32 x 64	\$9.95
59354	0.75 mH	0.4	16 x 32 x 64	\$10.55
59355	0.82 mH	0.43	16 x 32 x 64	\$11.10
59356	0.91 mH	0.45	16 x 32 x 64	\$11.85
59357	1.0 mH	0.47	16 x 32 x 64	\$12.55
59358	1.1 mH	0.5	16 x 32 x 64	\$12.65
59359	1.2 mH	0.54	16 x 32 x 64	\$13.35
59360	1.3 mH	0.57	16 x 32 x 64	\$14.00
59361	1.5 mH	0.6	16 x 32 x 64	\$14.55
59362	1.6 mH	0.63	19 x 38 x 76	\$15.10
59363	1.8 mH	0.68	19 x 38 x 76	\$16.20
59364	2.0 mH	0.7	19 x 38 x 76	\$17.30
59365	2.2 mH	0.76	19 x 38 x 76	\$18.30
59366	2.4 mH	0.81	19 x 38 x 76	\$18.40
59367	2.7 mH	0.87	19 x 38 x 76	\$19.70
59368	3.0 mH	0.93	19 x 38 x 76	\$21.00
59369	3.3 mH	0.98	22 x 45 x 89	\$21.20
59370	3.6 mH	1.03	22 x 45 x 89	\$22.30
59371	3.9 mH	1.09	22 x 45 x 89	\$23.40
59372	4.3 mH	1.15	22 x 45 x 89	\$24.80
59373	4.7 mH	1.22	22 x 45 x 89	\$24.90
59374	5.1 mH	1.29	22 x 45 x 89	\$26.15
59375	5.6 mH	1.36	22 x 45 x 89	\$27.65
59376	6.2 mH	1.43	22 x 45 x 89	\$29.40
59377	6.8 mH	1.51	25 x 51 x 102	\$29.60
59378	7.5 mH	1.59	25 x 51 x 102	\$31.35
59379	8.2 mH	1.67	25 x 51 x 102	\$33.10
59380	9.1 mH	1.75	25 x 51 x 102	\$35.30
59381	10 mH	1.84	25 x 51 x 102	\$37.35
59382	11 mH	1.98	25 x 51 x 102	\$37.60
59383	12 mH	2.12	25 x 51 x 102	\$39.65
59384	13 mH	2.27	25 x 51 x 102	\$41.55
59385	15 mH	2.42	25 x 51 x 102	\$45.30

Solen Air Cored Inductors

Perfect Lay Hexagonal Winding

Solen Inc. was the first inductor design company to introduce the perfect lay hexagonal winding technique to manufacture inductors and to apply it to the design of a complete line of air cored inductors for the loudspeaker industry. Engineering efforts in component quality, lower resistance and specially tight tolerance have yielded the successful development of the Perfect Lay Hexagonal Winding Air Cored Inductors.

As opposed to standard machine wound which produce non precision random or square type loose winding, high precision perfect lay hexagonal winding technique has several advantages over the machine wound type. The following describes several engineering developments that were incorporated in the design of the Perfect Lay Hexagonal Winding Air Cored Inductors to improve the quality factor, to lower the d. c. resistance, to linearized the a. c. resistance, to lower the magnetostriiction and to better tolerance.

Magnetostriction effect

The tight honeycomb structured winding cut most of the non linear magnetostriction losses via acoustic radiation which is a distortion produced by the mechanical vibration of each turn of wire induced by the alternating magnetic field resulting from the alternating current passing into the inductor.

All those factors combine to give an superior inductor with the best possible specifications: a higher quality factor, lower d. c. resistance, more linear a. c. resistance, lower magnetostriction losses, closer tolerance, lower stray capacitance, longer stability and the best sonic quality for any given value of inductor.

They are the NEC PLUS ULTRA of todays inductors because they were originally designed has a cost no object project and has a no compromise achievement.

General Information

Conductor:	Enamelled Pure Copper Solid Round Type.
Construction:	Hollow Cylindrical Type, Radial Leads.
Winding:	Perfect Layer Hexagonal Self-supporting Type.
Dielectric:	Polyurethane Polyamide Enamel.
Leads:	Pure Copper

Technical Data

Inductance Range/tolerance:	0.10 Mh ... 30 Mh, E24 Series, $\pm 1\%$.
Conductor Material:	99.99 % Purity Annealed Copper.
Electrical Conductivity:	101.5 %.
Test Voltage:	1000 Vac

Features

Linear AC Resistance.
Very Low Magnetostriction Distortion.
Constant Inductance With Voltage Variation.
Constant Inductance With Current Variation.
No Saturation Distortion.
No Heteresis Distortion.

Electrical Performance

High Quality Factor.
Very Low DC Resistance.
Low Ac Resistance.
Low Skin Effect Losses.
Low Proximity Effect Losses.
Low Self Capacitance.

Almost 300 Standard values to choose from, plus custom sizes!

Please note below, that we are showing you the range of values available for each inductor gauge group.

Simply call The Parts Connection for the quote on the value of the inductor that you require.

Also included, for your convenience, is the list price (\$US), for the first and last value available in each conductor gauge group.

INDUCTORS

Solen Air Cored Inductors



12 AWG COPPER

SKU #	Inductance	DCR(Ohms)	Dia.(mm)	Price \$US
59075	0.33 mH	0.07	19 x 38 x 76	\$15.35
59076	0.36 mH	0.08	19 x 38 x 76	\$16.15
59077	0.39 mH	0.08	19 x 38 x 76	\$16.95
59078	0.43 mH	0.09	19 x 38 x 76	\$17.95
59079	0.47 mH	0.1	19 x 38 x 76	\$18.05
59080	0.51 mH	0.1	19 x 38 x 76	\$18.95
59081	0.56 mH	0.11	19 x 38 x 76	\$20.05
59082	0.62 mH	0.11	19 x 38 x 76	\$21.30
59083	0.68 mH	0.11	22 x 45 x 89	\$21.35
59084	0.75 mH	0.12	22 x 45 x 89	\$22.75
59085	0.82 mH	0.12	22 x 45 x 89	\$23.95
59086	0.91 mH	0.13	22 x 45 x 89	\$25.45
59087	1.0 mH	0.14	22 x 45 x 89	\$27.05
59088	1.1 mH	0.15	22 x 45 x 89	\$27.20
59089	1.2 mH	0.16	22 x 45 x 89	\$28.70
59090	1.3 mH	0.17	22 x 45 x 89	\$30.10
59091	1.5 mH	0.19	22 x 45 x 89	\$31.25
59092	1.6 mH	0.2	25 x 51 x 102	\$32.45
56532	1.8 mH	0.21	25 x 51 x 102	\$34.85
59093	2.0 mH	0.22	25 x 51 x 102	\$37.15
59094	2.2 mH	0.24	25 x 51 x 102	\$39.25
59095	2.4 mH	0.26	25 x 51 x 102	\$39.45
59096	2.7 mH	0.28	25 x 51 x 102	\$42.35
59097	3.0 mH	0.3	25 x 51 x 102	\$45.10
59098	3.3 mH	0.32	32 x 64 x 127	\$45.50
59099	3.6 mH	0.34	32 x 64 x 127	\$47.90
59100	3.9 mH	0.35	32 x 64 x 127	\$50.30
59101	4.3 mH	0.37	32 x 64 x 127	\$53.30
59102	4.7 mH	0.4	32 x 64 x 127	\$53.55
59103	5.1 mH	0.42	32 x 64 x 127	\$56.25
59104	5.6 mH	0.45	32 x 64 x 127	\$59.45
59105	6.2 mH	0.47	32 x 64 x 127	\$63.20
59106	6.8 mH	0.49	38 x 76 x 152	\$63.60
59107	7.5 mH	0.52	38 x 76 x 152	\$67.50
59108	8.2 mH	0.54	38 x 76 x 152	\$71.20
59109	9.1 mH	0.57	38 x 76 x 152	\$75.85
59110	10 mH	0.6	38 x 76 x 152	\$80.25
59111	11 mH	0.65	38 x 76 x 152	\$80.90
59112	12 mH	0.7	38 x 76 x 152	\$85.20
59113	13 mH	0.75	38 x 76 x 152	\$89.35
59114	15 mH	0.79	38 x 76 x 152	\$92.90
59115	16 mH	0.83	45 x 89 x 178	\$96.40
59116	18 mH	0.88	45 x 89 x 178	\$103.45
59117	20 mH	0.92	45 x 89 x 178	\$110.25
59118	22 mH	0.99	45 x 89 x 178	\$116.40
59119	24 mH	1.06	45 x 89 x 178	\$117.15
59120	27 mH	1.13	45 x 89 x 178	\$125.70
59121	30 mH	1.2	45 x 89 x 178	\$133.90

Solen Air Cored Inductors



14 AWG COPPER

SKU #	Inductance	DCR(Ohms)	Dia.(mm)	Price \$US
59122	0.16 mH	0.07	14 x 29 x 57	\$6.65
59123	0.18 mH	0.08	14 x 29 x 57	\$7.10
59124	0.20 mH	0.08	14 x 29 x 57	\$7.60
59125	0.22 mH	0.09	14 x 29 x 57	\$7.85
59126	0.24 mH	0.1	14 x 29 x 57	\$8.05
59127	0.27 mH	0.1	14 x 29 x 57	\$8.65
59128	0.30 mH	0.11	14 x 29 x 57	\$9.20
59129	0.33 mH	0.11	16 x 32 x 64	\$9.30
59130	0.36 mH	0.11	16 x 32 x 64	\$9.80
59131	0.39 mH	0.12	16 x 32 x 64	\$10.30
59132	0.43 mH	0.12	16 x 32 x 64	\$10.90
56535	0.47 mH	0.13	16 x 32 x 64	\$10.95
59133	0.51 mH	0.14	16 x 32 x 64	\$11.50
59134	0.56 mH	0.15	16 x 32 x 64	\$12.15
59135	0.62 mH	0.16	16 x 32 x 64	\$12.90
59136	0.68 mH	0.17	19 x 38 x 76	\$12.95
59137	0.75 mH	0.18	19 x 38 x 76	\$13.80
59138	0.82 mH	0.19	19 x 38 x 76	\$14.55
59139	0.91 mH	0.2	19 x 38 x 76	\$15.45
59140	1.0 mH	0.21	19 x 38 x 76	\$16.40
59141	1.1 mH	0.23	19 x 38 x 76	\$16.50
59142	1.2 mH	0.24	19 x 38 x 76	\$17.40
59143	1.3 mH	0.26	19 x 38 x 76	\$18.25
59144	1.5 mH	0.28	19 x 38 x 76	\$18.95
59145	1.6 mH	0.29	22 x 45 x 89	\$19.70
59146	1.8 mH	0.3	22 x 45 x 89	\$21.10
59147	2.0 mH	0.31	22 x 45 x 89	\$22.50
53020	2.1 mH	0.31	22 x 45 x 89	\$23.80
59148	2.2 mH	0.33	22 x 45 x 89	\$23.80
59149	2.4 mH	0.36	22 x 45 x 89	\$23.90
59150	2.7 mH	0.39	22 x 45 x 89	\$25.70
59151	3.0 mH	0.42	22 x 45 x 89	\$27.35
59152	3.3 mH	0.45	25 x 51 x 102	\$27.60
59153	3.6 mH	0.47	25 x 51 x 102	\$29.05
59154	3.9 mH	0.49	25 x 51 x 102	\$30.50
59155	4.3 mH	0.52	25 x 51 x 102	\$32.30
53173	4.7 mH	0.56	25 x 51 x 102	\$32.45
59156	5.1 mH	0.59	25 x 51 x 102	\$34.10
59157	5.6 mH	0.63	25 x 51 x 102	\$36.00
59158	6.2 mH	0.67	32 x 64 x 127	\$38.30
59159	6.8 mH	0.71	32 x 64 x 127	\$38.55
59160	7.5 mH	0.75	32 x 64 x 127	\$40.90
59161	8.2 mH	0.79	32 x 64 x 127	\$43.15
59162	9.1 mH	0.83	32 x 64 x 127	\$45.95
59163	10 mH	0.87	32 x 64 x 127	\$48.65
59164	11 mH	0.96	32 x 64 x 127	\$49.05
59165	12 mH	1.03	32 x 64 x 127	\$51.65
59166	13 mH	1.11	32 x 64 x 127	\$54.15
59167	15 mH	1.17	32 x 64 x 127	\$56.30
59168	16 mH	1.24	38 x 76 x 152	\$58.45
59169	18 mH	1.29	38 x 76 x 152	\$62.70
59170	20 mH	1.35	38 x 76 x 152	\$67.00
59171	22 mH	1.44	38 x 76 x 152	\$70.70
59172	24 mH	1.53	38 x 76 x 152	\$71.00
59173	27 mH	1.62	38 x 76 x 152	\$76.15
59174	30 mH	1.71	38 x 76 x 152	\$81.15

Solen Air Cored Inductors



16 AWG COPPER

SKU #	Inductance	DCR(Ohms)	Dia.(mm)	Price \$US
59175	0.10 mH	0.08	11 x 22 x 45	\$3.30
59176	0.11 mH	0.08	11 x 22 x 45	\$3.45
59177	0.12 mH	0.09	11 x 22 x 45	\$3.65
59178	0.13 mH	0.09	11 x 22 x 45	\$3.85
59179	0.15 mH	0.1	11 x 22 x 45	\$4.00
59180	0.16 mH	0.11	13 x 25 x 51	\$4.15
59181	0.18 mH	0.11	13 x 25 x 51	\$4.45
59182	0.20 mH	0.12	13 x 25 x 51	\$4.70
59183	0.22 mH	0.13	13 x 25 x 51	\$5.00
59184	0.24 mH	0.14	13 x 25 x 51	\$5.15
55642	0.25 mH	0.14	13 x 25 x 51	\$5.35
59185	0.27 mH	0.15	13 x 25 x 51	\$5.35
56533	0.30 mH	0.13	13 x 25 x 51	\$5.75
59186	0.33 mH	0.13	14 x 29 x 57	\$5.80
59187	0.36 mH	0.17	14 x 29 x 57	\$6.10
59188	0.39 mH	0.18	14 x 29 x 57	\$6.40
59189	0.43 mH	0.19	14 x 29 x 57	\$6.75
53021	0.47 mH	0.21	14 x 29 x 57	\$6.80
59190	0.51 mH	0.22	14 x 29 x 57	\$7.15
59191	0.56 mH	0.23	14 x 29 x 57	\$7.55
59192	0.62 mH	0.24	14 x 29 x 57	\$8.00
59193	0.68 mH	0.25	16 x 32 x 64	\$8.05
59194	0.75 mH	0.27	16 x 32 x 64	\$8.55
59195	0.82 mH	0.28	16 x 32 x 64	\$9.00
59196	0.91 mH	0.3	16 x 32 x 64	\$9.60
53017	1.0 mH	0.31	16 x 32 x 64	\$10.20
55640	1.1 mH	0.33	16 x 32 x 64	\$10.25
59197	1.2 mH	0.35	16 x 32 x 64	\$10.80
59198	1.3 mH	0.38	16 x 32 x 64	\$11.35
59199	1.5 mH	0.41	16 x 32 x 64	\$11.75
59200	1.6 mH	0.44	19 x 38 x 76	\$12.20
59201	1.8 mH	0.46	19 x 38 x 76	\$13.10
59202	2.0 mH	0.48	19 x 38 x 76	\$14.00
56534	2.1 mH	0.48	19 x 38 x 76	\$14.80
55643	2.2 mH	0.52	19 x 38 x 76	\$14.80
59203	2.4 mH	0.56	19 x 38 x 76	\$14.85
59204	2.7 mH	0.6	19 x 38 x 76	\$15.95
59205	3.0 mH	0.63	19 x 38 x 76	\$17.00
59206	3.3 mH	0.66	22 x 45 x 89	\$17.15
59207	3.6 mH	0.7	22 x 45 x 89	\$18.05
59208	3.9 mH	0.73	22 x 45 x 89	\$18.95
59209	4.3 mH	0.77	22 x 45 x 89	\$20.10
59210	4.7 mH	0.82	22 x 45 x 89	\$20.15
59211	5.1 mH	0.86	22 x 45 x 89	\$21.20

Solen Air Cored Inductors



16 AWG COPPER cont'd

SKU #	Inductance	DCR(Ohms)	Dia.(mm)	Price \$US
59212	5.6 mH	0.91	22 x 45 x 89	\$22.40
59213	6.2 mH	0.96	22 x 45 x 89	\$23.80
59214	6.8 mH	1.01	25 x 51 x 102	\$24.00
59215	7.5 mH	1.07	25 x 51 x 102	\$25.40
59216	8.2 mH	1.12	25 x 51 x 102	\$26.80
59217	9.1 mH	1.18	25 x 51 x 102	\$28.55
59218	10 mH	1.24	25 x 51 x 102	\$30.20
59219	11 mH	1.38	25 x 51 x 102	\$30.45
59220	12 mH	1.52	25 x 51 x 102	\$32.10
55641	12.5 mH	1.52	25 x 51 x 102	\$33.70
59221	13 mH	1.66	25 x 51 x 102	\$33.70
59222	15 mH	1.7	25 x 51 x 102	\$35.00
59223	16 mH	1.79	32 x 64 x 127	\$36.30
59224	18 mH	1.88	32 x 64 x 127	\$38.95
59225	20 mH	1.97	32 x 64 x 127	\$41.50
59226	22 mH	2.07	32 x 64 x 127	\$43.95
59227	24 mH	2.17	32 x 64 x 127	\$44.10
59228	27 mH	2.27	32 x 64 x 127	\$47.35
59229	30 mH	2.37	32 x 64 x 127	\$50.40

RESISTORS

VISHAY

The VTA series Bulk Metal Foil™ series resistors feature extremely low inductive and capacitive reactance, enabling very linear performance at high frequencies, as well as very fast response time to pulsed or transient signals. The Bulk Metal Foil resistive element provides extremely low noise and guarantees excellent long term stability. The VTA series are packaged in a transfer molded case with tinned copper leads. See the Vishay white paper in the resource section.

NOTE: Although the VTA52, VTA54 and VTA55 are rated for 1.0, 0.5 and 0.3 watts respectively, this rating is based on a 70 degree Celsius ambient temperature. Given their large case package and the fact that all metal-film resistors are commercially rated at 25 degrees Celsius, it is safe to assume that these ratings are conservative.

4 ppm refers to the resistor TCR. TCR means Temperature Coefficient of Resistance or the change in resistance versus the change in temperature, rated in parts per million (ppm) per degree Celsius. 4 ppm converts to 0.000004% !!



Vishay VTA52 Metal Foil™ (1.0 watt, 0.5%, 4ppm - axial lead)

SKU#	Value	SKU#	Value	SKU#	Value	SKU#	Value	Price \$US
50506	100R	50507	332R	50508	499R	50509	750R	
50510	1K0	50511	1K21	50512	2K21	50513	3K32	
50514	4K75	50515	10K	54314	15K			\$6.25
50516	22K1	50517	33K2	50518	49K9			\$6.75
50519	75K0	50520	100K					\$7.75
50521	274K	50522	301K	50523	332K	50524	374K	
50525	422K	50526	475K	50527	499K			\$9.00
50528	549K	50529	576K	50530	621K	50531	649K	
50532	681K	50533	715K	50534	750K			\$9.50

Diameter(D) 0.26"(6.6mm)
 Length(L) 1.20"(30.3mm)
 Lead Diameter 0.03"(0.8mm)
 Lead Length 1.50"(38mm)

Vishay VTA54 Metal Foil™



Diameter(D) 0.26"(6.6mm)
 Length(L) 0.75"(19mm)
 Lead Diameter 0.03"(0.8mm)
 Lead Length 1.50"(38mm)

Vishay VTA54 Metal Foil™ (0.5 watt, 0.5%, 4ppm - axial lead)

SKU#	Value	SKU#	Value	SKU#	Value	SKU#	Value	Price \$US
50498	33R2	50499	270K	50500	301K	50501	332K	
50502	374K	50503	442K	50504	475K	50505	499K	\$9.00

Vishay VTA55 Metal Foil™



Diameter(D)	0.26"(6.6mm)
Length(L)	0.50"(13.0mm)
Lead Diameter	0.03"(0.8mm)
Lead Length	1.50"(38mm)

Vishay VTA55 Metal Foil™ (0.3 watt, 0.5%, 4ppm - axial lead)

SKU#	Value	SKU#	Value	SKU#	Value	SKU#	Value	Price \$US
50420	1R0	50421	4R7	50422	10R0	54315	15R	
50423	22R1	50424	27R4	50425	33R2	50426	39R2	
50427	47R5	50428	56R2	53360	60R0	50429	68R1	
50430	75R0	53179	90R9	50431	100R	50432	110R	
50433	150R	50434	175R	50435	221R	50436	249R	
50437	275R	50438	300R	50439	332R	50440	374R	
50441	392R	50442	422R	50443	475R	50444	499R	
50445	562R	50446	590R	50447	649R	50448	750R	
50449	866R	50450	1K	50451	1K21	50452	1K33	
50453	1K5	50454	1K74	50455	2K0	50456	2K21	
50457	2K49	50458	2K74	50459	3K0	50460	3K32	
50461	3K65	50462	3K92	50463	4K3	50464	4K75	
50465	4K99	50466	5K62	50467	6K49	50468	7K32	
50469	8K66	50470	10K0	50471	12K0	50472	15K0	
50473	18K0	50474	20K0					\$6.00
50475	22K1	50476	24K3	50477	27K0	50478	30K1	
50479	33K2	50480	39K0	50481	43K0	50482	47K	
50483	49K9	50484	51K0					\$6.75
50485	59K0	50486	68K0	50487	75K0	50488	82K1	
50489	91K1	50490	95K3	50491	100K			\$7.75
50492	121K	50493	150K	50494	174K	50495	187K	
50496	221K	50497	249K					\$8.25

RESISTORS

HOLCO

Featuring laser spiralling to achieve precise close tolerance values and high stability. Their non-magnetic construction and solder-dipped copper leads contribute markedly to their performance. Holco resistors use gold to spot-weld the endcaps to the body.

Available in 1/4, 1/2 and 1 watt ratings (H8, H4, H2 respectively) with 0.5% tolerance and a resistance temperature coefficient rating of 50 parts-per-million (PPM), the Holco resistors are ideal for audio use.

Holco H8



NOTE: All our Holco resistors are 0.5% tolerance not 1%, offering the audiophile twice the accuracy as those resistors available from alternate sources!

Diameter 0.10"(2.4mm)
 Length 0.31"(7.8mm)
 Lead Diameter 0.02"(0.6mm)
 Lead Length 1.50"(38mm)

Holco H8-Precision Metal Film (1/4 watt, 0.5%, 50ppm)

SKU#	Value	Price \$US								
54527	8R2	50000	10R	54526	14R3	53778	20R	55610	20R7	
54528	20R7	50001	22R1	54531	29R	53779	31R6	50002	33R2	
53781	40R	54530	41R	53782	44R7	50003	47R5	53783	50R	
50004	56R2	54529	58R	53784	63R	53785	63R2	50005	68R1	
50006	75R	54532	82R	50007	82R1	53786	82R1	53787	89R	
53788	89R4	50008	91R	50009	100R	54533	116R	50010	118R	
53789	126R	53790	158R	54534	164R	53791	178R	53792	200R	
50011	221R	53793	224R	54536	232R	53794	250R	53795	252R	
53796	315R	54535	312R	53797	316R	54537	328R	50012	332R	
53798	400R	53799	464R	50013	475R	50014	499R	53800	500R	
50015	562R	53801	630R	53802	631R	54539	655R	50016	681R	
50017	749R	53803	790R	53804	800R	50018	825R	53805	891R	
50019	910R	54540	930R	50020	1K0	53806	1K1	53807	1K12	
53808	1K25	53809	1K26	54542	1K32	53810	1K58	54541	1K87	
53811	2K	53812	2K05	53813	2K20	50021	2K21	53814	2K23	
50022	2K43	53815	2K50	55597	2K65	50023	2K74	53816	2K9	
53817	3K15	53818	3K16	50024	3K32	53819	3K7	54545	3K77	
50025	3K92	53820	3K97	3821	4K	53822	4K10	53823	4K4	
54546	4K7	53824	4K47	50026	4K75	53825	5K	53826	5K5	
53827	5K6	50027	5K62	53828	5K8	53829	6K	53830	6K3	
50028	6K81	53831	6K85	53832	7K1	53833	7K4	50029	7K49	
53834	7K5	53835	7K95	53836	8K	50030	8K21	53837	8K45	
53838	8K75	53839	8K8	53840	8K9	53841	8K94	53842	9K	
50031	9K10	53843	9K2	53844	9K35	53845	9K5	53846	9K6	
53847	9K7	53848	9K75	53849	9K8	53850	9K85	53851	9K9	
53852	9K95	50032	10K	53853	10K3	55593	10K4	53854	10K9	
50033	11K	53855	11K2	50034	12K	53856	12K6	53857	13K7	
54551	13K8	53858	14K2	53859	14K6	50035	15K	53860	15K9	
53861	16K	53862	16K9	53863	17K5	53864	17K8	50036	18K	
53865	18K4	53866	18K7	53867	19K	53868	19K2	53869	19K4	
50037	20K	53870	20K6	53871	21K9	50038	22K1	53872	22K4	
50039	24K3	53873	25K	53874	27K	50040	27K4	53875	27K6	
53876	28K1	53877	29K1	53878	30K	53879	31K6	50041	33K2	
53880	34K2	53881	35K4	50042	36K5	53882	36K9	53883	37K4	
0043	39K2	53884	39K7	53885	40K	53886	42K	50044	43K	
53887	43K7	53888	44K5	53889	44K7	53890	45K	53891	46K	
53892	46K9	50045	47K	53893	47K5	53894	49K4	53895	49K6	
53896	49K7	53897	49K8	53898	49K9	53899	50K	53900	51K	
53901	55K3	50046	56K2	53902	56K3	53903	60K3	53904	63K1	
50047	68K1	53905	68K4	53906	70K8	53907	73K	50048	75K	
53908	79K4	53909	80K	50049	82K1	53910	84K2	53911	87K4	
53912	89K1	53913	90K	50050	91K	53914	92K	53915	92K1	
53916	93K7	53917	95K	53918	96K	53919	96K8	53920	97K5	
53921	98K	53922	98K4	53923	98K7	53924	99K1	53925	99K4	
53926	99K6	53927	99K7	53928	99K8	53929	99K9	50051	100K	
53930	109K	53931	112K	50052	121K	53932	125K	53933	138K	
53934	141K	50053	150K	53935	151K	53936	158K	53937	171K	
50054	174K	53938	177K	53939	187K	53940	199K	50055	200K	
53941	210K	53942	218K	50056	221K	53943	223K	53944	225K	
53945	230K	53946	234K	53947	237K	53948	240K	53949	242K	
53950	244K	53951	245K	53952	246K	53953	247K	53954	248K	
50057	249K	33955	250K	50058	274K	50059	301K	50060	332K	
50061	348K	50062	374K	50063	422K	50064	449K		\$0.50	

Holco H8-Precision Metal Film (1/4 watt, 0.5%, 50ppm) Cont'd

Holco H4



Diameter	0.14"(3.6mm)
Length	0.38"(9.5mm)
Lead Diameter	0.03"(0.8mm)
Lead Length	1.50"(38mm)

Holco H4-Precision Metal Film (1/2 watt, 0.5%, 50ppm)

RESISTORS

Holco H2



Diameter	0.17"(4.2mm)
Length	0.61"(15.5mm)
Lead Diameter	0.03"(0.8mm)
Lead Length	1.50"(38mm)

Holco H2-Precision Metal Film (1 watt, 0.5%, 50ppm)

CADDOCK

All the Caddock resistors following feature Caddock's Micronox™ resistance film. This construction provides non-inductive performance for faster settling times and minimum distortion, especially at higher frequencies. In fact, Caddock film resistors are about as inductive as a straight piece of lead wire the length of the resistor body! This construction also provides a high voltage rating and long term stability.

The MP-816 and MP-820 power film resistors are the smallest 16 and 20 watt heatsink mountable resistors available. Their design features include a TO-220 package with single screw mounting, a molded silicon case, tinned copper leads, and a resistive element isolated from the metal heatsink tab. Dielectric strength is 1000 volts A.C. and maximum working voltage is 300V. Note that a TO-220 style heatsink is required for the rated power dissipation at a low 25°C case temperature. They are rated at 2.25 and 2.75 watts respectively in free air without a

heatsink. The MP series resistors are ideal for loudspeaker crossovers, especially tweeter networks, or other high power applications.

The MK-132 series provides a low cost precision film resistor in a small radial lead package. They also feature a transfer molded case, tinned copper leads, 400V maximum operating voltage, and a 1% standard tolerance. The MK series resistors are ideal for critical applications such as input loading resistors, feedback loops, and EQ. networks as a lower cost alternative to the Vishay VTA series.

The MS-223 series are a non-inductive power film resistor in an axial lead package. Construction features

Caddock - MP Kool Tab™



	MP-816	MP-820
Height	0.44"(16.3mm)	0.58"(14.7mm)
Width	0.41"(10.4mm)	0.40"(10.2mm)
Depth	0.12"(2.8mm)	0.18"(4.5mm)
Lead Diameter	0.03"(.08mm)	0.03"(.08mm)
Lead Length	0.45"(11.4mm)	0.45"(11.4mm)
Lead Spacing	0.20"(5.1mm)	0.20"(5.1mm)

Caddock - MP-816 Kool Tab™ Power Film Resistors (16 watt, 1%, TO-220 package - radial lead)

SKU#	Value	SKU#	Value	SKU#	Value	SKU#	Value	Price \$US	
51125	0.1R	51126	0.2R	51127	0.5R	51128	1.0R	51129	1.5R
51130	2.0R	51131	2.5R	51132	3.0R	51133	3.5R	51134	4.0R
51135	4.7R	51136	5.1R	51137	6.0R	51138	6.9R	51139	7.5R
51140	8.5R							\$10.95	

Caddock - MP-820 Kool Tab™ Power Film Resistors (20 watt, 1%, TO-220 package - radial lead)

SKU#	Value	SKU#	Value	SKU#	Value	SKU#	Value	Price \$US	
51141	10R0	51142	12R0	51143	15R0	51144	18R0	51145	20R0
53355	30R0	51146	47R0	51147	100R	51148	150R	51149	220R
51150	330R	51151	470R	51152	1K0			\$10.25	

Caddock - MS-223



Diameter	0.23"(5.8mm)
Length	0.48"(12.2mm)
Lead Diameter	0.04"(1.0mm)
Lead Length	1.5"(38.1mm)

Caddock - MK-223 (3 watt, 1% -gold plated axial lead)

SKU#	Value	SKU#	Value	SKU#	Value	SKU#	Value	Price \$US	
51251	4K7	51252	10K0	51253	20K0	51254	22K1	51255	26K2
58503	27K	51256	27K4	51257	28K7	58502	30K	51258	33K2
51259	39K2	51260	47K5	51261	100K			\$9.40	

RESISTORS

Caddock - MK-132

CADDOCK®

Height	0.29"(7.4mm)
Width	0.29"(7.4mm)
Depth	0.10"(2.4mm)
Lead Diameter	0.025"(.7mm)
Lead Length	1.5"(38.1mm)
Lead Spacing	0.20"(5.1mm)

Caddock - MK-132 (0.75 watt, 1% - radial lead)

SKU#	Value	Price \$US								
51153	4R7	51154	10R0	51155	15R0	51156	22R1	51157	27R4	\$7.60
51158	33R2	51159	39R2	51160	47R5	51161	56R2	51162	68R1	
51163	75R0	51164	90R9							\$4.75
51165	100R	51166	110R	51167	150R	51168	175R	51169	221R	
51170	249R	51171	275R	51172	300R	51173	332R	51174	374R	
51175	475R	51176	499R	51177	562R	51178	649R	51179	750R	
51180	866R	51181	1K0	51182	1K21	51183	1K33	51184	1K5	
51185	1K74	51186	2K0	51187	2K255	51188	2K43	51189	2K74	
51190	3K0	51191	3K32	51192	3K65	51193	3K92	51194	4K3	
51195	4K75	51196	4K99	51197	5K62	51198	6K49	51199	7K32	
51200	8K66	20143	9.35K	51201	10K0	51202	12K0	51203	15K0	
51204	18K0	51205	20K0	51206	22K1	51207	24K3	51208	27K0	
51209	30K1	51210	33K2	51211	39K0	51212	43K0	51213	47K0	
51214	49K9	51215	51K0	51216	59K0	51217	68K0	51218	75K0	
51219	82K1	51220	91K1	51221	95K3					\$3.95
51222	100K	51223	121K	51224	150K	51225	174K	51226	187K	
51227	221K	51228	249K	51229	270K	51230	287K	51231	301K	
51232	316K	51233	332K	51234	352K	51235	374K	51236	422K	
51237	475K	51238	499K	51239	621K	51240	681K	51241	750K	
51242	975K									\$4.75
51243	1M0	51244	1M21	51245	1M5	51246	2M21	51247	2M5	
51248	3M3	51249	4M7	51250	10MO					\$6.15

CONTROLS

ATTENUATORS

The concept of using top quality resistors, capacitors, wire etc. should also extend to the components often selected as an afterthought, namely volume, balance, selector and function controls. Skimping in these areas can noticeably compromise the sonic links in the chain: our selection of these parts is designed to minimize any signal losses at affordable price points.

In particular, the inexpensive volume and balance controls found in many

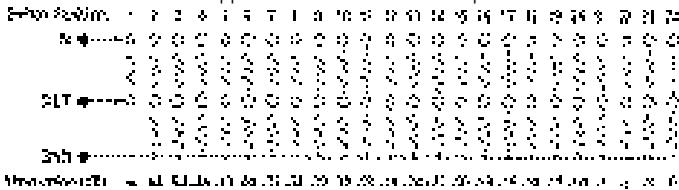
low-to-medium priced preamps are usually a hindrance to transparent sound quality. In addition, a large number of inexpensive volume controls do not track very well, the left to right balance changing depending on the volume setting. This results in an excess of "knob twiddling" and distracts you from important things, like music! Replacing these units with any of the following high-grade brands is a worthwhile exercise in any upgrading or rebuilding project.

NEW

ELMA ATTENUATORS



Schematic - Ladder Stepped Attenuator with audio taper.



Elma Gold Point Series

The Elma attenuator is a sophisticated design that is based on the 12 position Elma selector switch. What Elma has done is to introduce a pair of printed circuit boards that allow the selector switch to now be used as an attenuator. When Holco 1/4 watt resistors are soldered to the PC board(s), a very high quality, low noise, extended bandwidth attenuator switch is created.

We carry three different attenuators - a single deck series attenuator, a two deck series attenuator, and a two deck ladder attenuator. The hobbyist can then use two of the single deck series attenuators to provide independent left and right channel volume control, or use the dual deck series attenuator as a one piece 'stereo' volume control. Finally, there is the option to go for the one piece 'stereo' two deck ladder attenuator - this switch is a more complex device, and is priced accordingly. However, the constant impedance ratio of the ladder type attenuator makes for a less variable frequency response with volume control switch position. The ladder switch also eliminates a significant number of solder connections from the signal path, as compared to the series attenuator.

For the ultimate ladder attenuator, see the Sonic Frontiers "Shalco" switch which we custom designed (this switch only comes with single deck construction - ie. one switch required for each channel). The Shalco switch also offers a much finer volume steps due to the greater number of steps.

Elma Attenuators

SKU#	Description	Price \$US
58678	Elma MONO Series attenuator - 10K volume	\$99.00
58889	Elma MONO Series attenuator - 25K volume	\$99.00
58890	Elma MONO Series attenuator - 50K volume	\$99.00
58891	Elma MONO Series attenuator - 100K volume	\$99.00
58892	Elma MONO Series attenuator - 250K volume	\$99.00
58679	Elma STEREO Series attenuator - 10K volume	\$139.00
58893	Elma STEREO Series attenuator - 25K volume	\$139.00
58894	Elma STEREO Series attenuator - 50K volume	\$139.00
58895	Elma STEREO Series attenuator - 100K volume	\$139.00
58896	Elma STEREO Series attenuator - 250K volume	\$139.00
58680	Elma STEREO Ladder attenuator - 10K volume	\$219.00
58897	Elma STEREO Ladder attenuator - 25K volume	\$219.00
58898	Elma STEREO Ladder attenuator - 50K volume	\$219.00
58899	Elma STEREO Ladder attenuator - 100K volume	\$219.00
58900	Elma STEREO Ladder attenuator - 250K volume	\$219.00

- All are 24 position switches.

- 600 Ohm attenuators are available in the above formats upon request, but not stocked.

- Please add \$75.00US for Custom values of quantities less than 20 units, and a 2-3 week lead time.

SONIC FRONTIERS



Sonic Frontiers Series Attenuator

SONIC FRONTIERS stereo series attenuator, as seen on the SFL-2 balanced line stage pre-amp. Four pole switch allows wiring for single ended or balanced operation. A lower cost alternative to the SHALLCO ladder attenuator, it offers performance superior to any potentiometer.

Comprised of an Electroswitch 24 pole 4 deck switch with silver plated brass contacts and HOLCO H8 (1/4 watt 0.5%) resistors. The switch has 24 positions with approx. 2dB volume step per division over most of its range. Balance control also available with 12dB attenuation each way, in steps of 0.5 and 1 dB. Good soldering skills and care required, but the results are well worth it! Enjoy! DIMENSIONS: Body: 2" Dia. x 2-1/4" L. Shaft: 1/4" Dia. x 1/2" L. with flat., 3/8" Dia. threaded bushing by 3/8" L.

SKU#	Description	Price \$US
53410	SFI series attenuator 10K balanced assembled	\$185.00
53408	SFI series attenuator 10K balanced kit	\$105.00
53403	SFI series attenuator 10K single ended assembled	\$125.00
56019	SFI series attenuator 10K single ended kit	\$85.00
53407	SFI series attenuator 50K balanced assembled	\$185.00
56024	SFI series attenuator 50K balanced kit	\$105.00
53402	SFI series attenuator 50K single ended assembled	\$125.00
56025	SFI series attenuator 50K single ended kit	\$85.00
53406	SFI series attenuator 100K balanced assembled	\$185.00
56026	SFI series attenuator 100K balanced kit	\$105.00
53401	SFI series attenuator 100K single ended assembled	\$125.00
56027	SFI series attenuator 100K single ended kit	\$85.00
53405	SFI series attenuator 250K balanced assembled	\$185.00
53400	SFI series attenuator 250K single ended assembled	\$125.00
56029	SFI series attenuator 250K single ended kit	\$85.00

SHALLCO LADDER ATTENUATOR



A superb mono volume control (TRUE ladder mono attenuator) in either a kit or assembled version that will out-perform anything else available. Comprised of SHALLCO 2 deck, 32-step switches, with coin silver contacts, HOLCO H8 (1/4 watt 0.5% 50ppm) metal film resistors and two small circuit boards (one is sandwiched between the two decks and the other mounts on the back of switch).

This switch offers you the most complete and thorough electrical contact of any switch we were able to find ANYWHERE in the world! With custom circuit boards for resistor mounting. All you have to do is solder the resistors to the circuit board and mount the switch into your equipment.

DIMENSIONS: 2-3/4"W x 2-3/4"H x 2-3/4"D 15/16" SHAFT LENGTH (3/8" THREADED, 9/16" SMOOTH) ELECTRICAL: Carrying Capacity - 10 amps Switching Capacity - up to 2 amps Contact resistance - initial - .005 ohms max - after life - .010 ohms max Insulation resistance - 50,000 megohms Dielectric withstanding voltage - 1500V RMS Dielectric withstanding voltage - after life - 1000V RMS MECHANICAL: Rotational life - 50,000 cycles minimum**, @ 250 amps @ 85 deg. C ** 1 cycle = one full CCW rotation Stop torque - 50 In. pounds

SKU#	Description	Price \$US
53416	Sonic Frontiers/Shallco dual mono ladder attenuators 10K Ohm assembled	\$400.00
53417	Sonic Frontiers/Shallco dual mono ladder attenuators 20K Ohm assembled	\$400.00
53418	Sonic Frontiers/Shallco dual mono ladder attenuators 50K Ohm assembled	\$400.00
53419	Sonic Frontiers/Shallco dual mono ladder attenuators 100K Ohm assembled	\$400.00
53420	Sonic Frontiers/Shallco dual mono ladder attenuators 250K Ohm assembled	\$400.00
53411	Sonic Frontiers/Shallco dual mono ladder attenuators 10K Ohm kit	\$320.00
53412	Sonic Frontiers/Shallco dual mono ladder attenuators 20K Ohm kit	\$320.00
53413	Sonic Frontiers/Shallco dual mono ladder attenuators 50K Ohm kit	\$320.00
53414	Sonic Frontiers/Shallco dual mono ladder attenuators 100K Ohm kit	\$320.00
53415	Sonic Frontiers/Shallco dual mono ladder attenuators 250K Ohm kit	\$320.00

CONTROLS

CONTROLS

VOLUME POTS

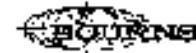
ALPS



"Black beauty type", with a conductive plastic element deposited on a phenolic substrate. Log taper. Includes wiring diagram and mounting hardware. DIMENSIONS: Body: 1.57" L x 1.35" W x 1.19" H, Shaft: standard slotted 1/4" D x .90" L, 3/8" L bushing, 6 solder pins.

SKU#	Description	Price \$US
53367	ALPS "Black Beauty" 50K dual volume control	\$39.00
53370	ALPS "Black Beauty" 50K dual balance control	\$39.00
53368	ALPS "Black Beauty" 100K dual volume control	\$39.00
53371	ALPS "Black Beauty" 100K dual balance control	\$39.00
53369	ALPS "Black Beauty" 250K dual volume control	\$39.00
53372	ALPS "Black Beauty" 250K dual balance control	\$39.00
57370	ALPS "Black Beauty" 10K dual volume control	\$39.00

BOURNS



91 series conductive plastic mono volume pots in linear and log taper. Rated 0.5 watt, 500Volts. DIMENSIONS: Body: 5/8" L x 1/2" H x 1/16" W, Shaft: standard slotted 1/4" D x 1/2" L, 3/8" L bushing, 3 solder pins.

SKU#	Description	Price \$US
53379	Bourns 91 series mono 5K Ohm linear taper potentiometer.	\$9.50
53375	Bourns 91 series mono 10K Ohm log taper potentiometer.	\$9.50
53380	Bourns 91 series mono 25K Ohm linear taper potentiometer.	\$9.50
53376	Bourns 91 series mono 50K Ohm log taper potentiometer.	\$9.50
53381	Bourns 91 series mono 100K Ohm linear taper potentiometer.	\$9.50
53377	Bourns 91 series mono 100K Ohm log taper potentiometer.	\$9.50
53382	Bourns 91 series mono 250K Ohm linear taper potentiometer.	\$9.50
53383	Bourns 91 series mono 500K Ohm linear taper potentiometer.	\$9.50
53378	Bourns 91 series mono 1 Meg Ohm log taper potentiometer.	\$9.50

NOBLE



As used in the Sonic Frontiers line, this is a conductive plastic element deposited on a polystyrene substrate. Includes wiring diagram and mounting hardware. DIMENSIONS: Body: 1.06" L x 1.06" W x 1.18" H, Shaft: standard slotted 1/4" D x .55" L, 3/8" L bushing, 8 solder pins.

SKU#	Description	Price \$US
53373	Noble 100K dual volume control	\$27.00
53374	Noble 100K dual balance control	\$27.00
55840	Noble 50K Dual Volume Control	\$27.00

SWITCHES

ELMA



2 Deck 12 Position

Sealed ceramic rotary switch with gold contacts 2 deck, 1 pole per deck, 12 position adjustable non-shorting. DIMENSIONS: 1-3/16" W x 13/16" H x 1-3/4" Dp. (from inside of front panel) Bushing: Standard 3/8" Dia. x 3/8" L fine pitch thread. Shaft: 1/4" Dia. x 9/16" long, no flats. Includes stop pins and mounting hardware.

SKU#	Description	Price \$US
53421	ELMA 2 deck 12 position adjustable rotary switch.	\$50.00



1 Deck 2 Pole 6 Position

Sealed single deck gold contact 2 pole 6 position adjustable non-shorting. DIMENSIONS: 11/16" dia. x 11/16" Dp. (from inside of front panel) Bushing: 3/8" dia. x 3/8" L. fine pitch thread. Shaft: 1/4" Dia. x 3/4" L. no flats. Includes stop pins and mounting hardware.

SKU#	Description	Price \$US
53422	ELMA 1 deck 2 pole 6 position adjustable rotary switch.	\$30.00

ELECTROSWITCH



Sealed silver alloy moving contact, brass fixed contact, 2 deck four position rotary switch. 30 degree index angle. DIMENSIONS: 1-5/16" W x 1-1/8" H (NOT including terminals) x 1-1/8" Dp. Bushing: 3/8" dia. x 3/8" L. fine pitch thread. Shaft: 1/4" Dia. x 7/16" L. no flats.

SKU#	Description	Price \$US
53423	Electroswitch 2 deck 4 position rotary switch..	\$20.00

SONIC FRONTIERS



Miniature toggle switch with silver contacts. rated 2 A @ 250VAC, 5A @ 120VAC. DIMENSIONS: 1/2" (12mm)H x 1/4" (6.5mm) W (single pole) or 7/16" (11mm) W (double pole) with 1/4" (6mm) Dia. x 3/8" (9mm) Lg. with 11/16" (17mm) "bat" style toggle. 1/16" 9(1.5mm) x 1/8" (3mm) Solder terminals. Includes nut, lock washer, and dress nut.

SKU#	Description	Price \$US
53424	Single Pole Double Throw toggle switch / PCB Mount	\$2.50
53425	Double Pole Double Throw toggle switch / Solder	\$3.50
54703	Double Pole Three Throw toggle switch / PCB Mount	\$4.25
54697	Single Pole Double Throw toggle switch / Solder	\$2.50

CONNECTORS

RCA CONNECTORS

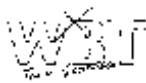
VAMPIRE



New for The Parts Connection is a select line of Vampire connectors. Most of the models that we are carrying are their premium line with oxygen free copper base metal, direct hard gold plating and teflon dielectric. These offer a step up in sound quality over standard RCA connectors which are generally gold over nickel plated with brass as the base metal. The Vampire OFC RCA females are the optimum choice when using premium quality interconnects with gold plated RCA plugs. They are easily identified over standard RCA jacks with their dual colour coded stripes.

SKU#	Model	Description	Price \$US
55459	CM1F-OFC	RCA female jack outside mount (nut on inside of panel) with colour coded washers and ground lug. Direct hard gold plated over OFC, teflon dielectric. Requires 0.375" (9.5mm) dia. mounting hole. Solder connection. No logo.	\$26.50/pr
55458	CM2F-OFC	RCA female jack inside mount (nut on outside of panel) with colour coded washers and ground lug. Direct hard gold plated over OFC, teflon dielectric. Requires 0.480" (12.5mm) dia. mounting hole. Solder connection. No logo.	\$30.50/pr
55457	Y	RCA male plug to two RCA female jacks at 90° to each other. Great for splitting single pre-amp outputs into two, for bi-amp systems, etc. Straight female jack extends out 1.60" (41mm) from face of panel RCA jack, offset jack 0.69" (17.5mm) from centerline. Gold plate over nickel over brass, teflon dielectric. colour coded bands with Vampire logo.	\$26.50/pr

WBT



The uncompromising quality of the German manufactured WBT line of connectors is well known. Their excellent signal conduction qualities are a result of superior surface finishes, close tolerances, superior base materials and excellent plating processes. The WBT line now features two series; the Topline, their standard product range and the new Midline, a more favorably priced series that still features many of the unique features of the WBT line. Construction of the Topline series is a five-layer 24 carat duplex gold plating over a base metal of 68% OFC copper with production tolerances of <2/100th mm (<0.0008"). The Topline series is easily identified by the polished grey sleeves and cross-hatched knurling and are non-ferromagnetic. The Midline series features a three-layer 24 carat standard gold plating over a base metal of a 52% Cu copper alloy and production tolerances of <5/100th mm (<0.002"). The Midline series is easily identified by their matte black sleeves and diagonal knurling. All WBT RCA connectors have teflon insulation between signal and ground and a 16 Ohm characteristic impedance.

WBT Topline Series

SKU#	Model	Description	Price \$US
53443	0101	RCA male plug for cables up to 9mm (0.35") dia. with locking outer collet and four-way split center pin. Solder Type. Pack of four incl. Torx key	\$105.00/set
53444	0150	RCA male plug for cables up to 11mm (0.43") dia. with locking outer collet and four-way split center pin. Solder Type. Pack of four incl. Torx key	\$120.00/set
53445	0201	RCA female chassis mount jack for wall thicknesses up to 6mm (0.23") with spring loaded center contacts. Solder type. Requires 12 mm (0.47") dia. mounting hole.	\$48.00/pr

WBT Midline Series

SKU#	Model	Description	Price \$US
55278	0144	RCA male plug for cables up to 9mm (0.35") dia. with locking outer collet and two-way split center pin. Solder Type. Pack of four incl. Torx key	\$44.00/set

CONNECTORS

CARDAS



These feature a hard rhodium plating over silver for excellent conductivity and durability. A one piece ground construction is used for better signal integrity.

SKU#	Description	Price \$US
56008	SRCA male plug, gold/rhodium with spring loaded ground contacts	\$29.00/pr
56009	AGMO all gold RCA male	\$15.00/pr
56010	XRCA 13mm adapter for SRCA	\$3.00/pr
56011	XRCA 11mm adapter for SRCA	\$3.00/pr
53446	GRFA Gold/Rhodium Female Jack (7/16" chassis hole)	\$18.00/pr
53447	GRMO Gold/Rhodium Male Plug	\$21.00/pr

KIMBER ULTRA CONNECT



Precision machined with a superb Ultrplate™ durable plating. As used in Sonic Frontiers' Signature and Reference products.

SKU#	Description	Price \$US
53448	FRCA female chassis-mount jacks	\$30.00/pr
53449	MRCA male plugs	\$30.00/pr

PRISMA RCA PLUG **PRISMA**®

High quality solid brass plug with split centre pin & rubber grip. Fits up to 6.5mm diameter cable. Colour coded.

SKU#	Description	Price \$US
58501	PRISMA Gold-Plated Rca plug	\$15.00/pr

AUDIOQUEST



0359 - The perfect match for your AQ cable! Gold colour, split center pin, 3 set-screws.

SKU#	Description	Price \$US
53450	Audioquest 0359 RCA male plugs (9mm)	\$17.50/pr

SONIC FRONTIERS



As seen in the standard Sonic Frontiers' products, these connectors are gold-plated, with a teflon dielectric.

SKU#	Description	Price \$US
53451	RCA female inside chassis mount jacks "Tiffany"-style	\$9.95/pr
53452	RCA female outside mount chassis jacks "Tiffany"-style	\$9.95/pr
53453	RCA male plugs "Tiffany"-Style (6mm)	\$4.95/pr
53455	RCA male plugs, locking type, split center pin, solder termination, WBT Style (9mm)	\$9.95/pr
53454	RCA male plugs, locking type, split center pin, screw termination, WBT Style (9mm)	\$9.95/pr

NEUTRIK



The Neutrik ProFi RCA plugs feature hard gold plating on signal and ground contacts and a spring loaded ground contact. This ensures that ground contact is made before signal contact and breaks after signal. Cable protection is provided by the Neutrik chuck system. Two internal chucks are provided. One for cables of 3.5 to 5.5 mm diameter, and one for cables 5.5 to 7.3 mm diameter.

SKU#	Description	Price \$US
53040	RCA male plugs (9mm) pairs	\$20.00/pr.

XLR CONNECTORS

NEUTRIK

These industry standard, Swiss-made audio connectors are manufactured to exacting standards. They feature a number of unique innovations, such as a chuck-type cable clamp, and no loose parts for simple, time-saving assembly. Also, they feature helitac phosphor bronze contacts for easier mating and better, longer-lived contact integrity. They have vented solder caps for improved solderability, and fiber-glass-reinforced inserts to avoid fracturing. The compliant ribs on the female insert prevent rattle, and the make-first/break-last feature of pin 1 ensures an equipment protecting shield connection. They have ground contacts to maintain ground continuity between the mating shells and a superior spring-latch mechanism. Base metal of females is 92% copper and 8% tin; males are 58% copper, 39% tin and 3% lead. Both have silver-plated contacts.



The following XLR connectors have silver-plated contacts and high-density, scratch-proof satin nickel-plated shells.

SKU#	Description	Price \$US
53047	3 PIN XLR plugs (female) - one piece unbreakable die-cast housing with damping ring - NC3FX	\$3.85
53048	3 PIN XLR plugs (male) - rear mountable insert, no tool required - NC3MX	\$3.50
53045	3 PIN XLR chassis mount jacks (female) - NC3FP1	\$4.25
53046	3 PIN XLR chassis mount jacks (male) - NC3MP	\$3.95

SONIC FRONTIERS



XLR jacks have nickel-plated brass contacts with a matte black finish brass body. XLR plugs have gold-over-nickel plated brass contacts with black plastic and brass bodies.

SKU#	Description	Price \$U.S.
53439	3 PIN XLR plugs (female)	\$1.75
53440	3 PIN XLR plugs (male)	\$1.75
53441	3 PIN XLR chassis mount jacks (female)	\$1.75
53442	3 PIN XLR chassis mount jacks (male)	\$1.75



The following XLR connectors have gold-plated contacts and black chrome-plated shells.

SKU#	Description	Price \$US
53043	3 PIN XLR plugs (female) - NC3FX-B	\$5.85
53044	3 PIN XLR plugs (male) - NC3MX-B	\$5.50
53041	3 PIN XLR chassis mount jacks (female) - NC3FP-B1	\$5.85
53042	3 PIN XLR chassis mount jacks (male) - NC3MP-B	\$5.50

Also available are 4, 5, 6, and 7 pin XLR jacks for power supply umbilicals and other applications, as well as right angle plugs. Call us for details!

CONNECTORS

BNC CONNECTORS

BNC CONNECTORS

75 Ohm BNC connectors provide the proper termination for 75 Ohm characteristic impedance co-ax digital interconnect cables. Proper 75 Ohm terminations eliminate signal reflections, reducing jitter in the digital data stream. A low cost upgrade to any CD transport/DAC combo using co-ax cable, they should be used at both ends.

AMPHENOL

Amphenol®

SKU#	Description	Price \$US
54377	75 Ohm BNC female bulkhead jack, solder connection, teflon dielectric, nickel plated.	\$4.95
55031	75 Ohm BNC male cable plug, crimp connection, teflon dielectric, nickel plated body with gold center pin.	\$4.95

VAMPIRE



SKU#	Description	Price \$US
56012	Cable mount BNC male plug. Three piece design with solder connected center pin and collet type ground connection. Hard gold plating over silver over copper sub-plate over brass base metal, teflon dielectric. Sand blast finished chrome barrel. max. cable dia. 0.32" (8mm)	\$12.50/ea.
56013	PC or bulkhead mount BNC female jack. Construction as above with black plastic body. Requires 7/16" (11mm) dia. hole. Includes gold plated lock washer and nut.	\$6.50/ea.

SPEAKER BINDING POSTS

VAMPIRE BINDING POSTS

Improve the detail and smoothness of your speakers by upgrading the binding posts. Upgrading your speaker binding posts will in most cases improve your sound more than you thought possible. Especially when you choose one of our top quality parts available below.

(Since a number of customers are a little unclear about, "how many posts do I need to buy?" Let's see if we can clarify this situation.

We sell all our posts in sets of 2. That means if you buy one set, you will have one dual post for each speaker cabinet, or 1 pair of dual binding posts.)



The Vampire binding post are rugged five way posts with keyed mounting blocks to prevent rotation during connection of speaker cables. All mount in 0.375" (9.5mm) holes on standard 0.75" (19mm) spacing. The Vampire binding posts also include a plastic shoulder washer, flat washer, and gold plated lock washers and double nuts to ensure that they do not loosen over time. Top nuts are 7/16" (12mm) hex for ease of tightening, and are color coded for ease of identification.

SKU#	Model	Description	Price \$US
55452	BP-HEX	Dual five way binding post for mounting in panels up to 0.25" (6.3mm) thick. Hard gold plating over sub-plating of silver AND copper on brass base metal. 1 set (1 pair of two dual binding posts).	\$33.00/set
55450	BP-1.5	Dual five way binding post for mounting in panels up to 0.75" (19mm) thick. Hard gold plating over sub-plating of silver AND copper on brass base metal. 1 set (1 pair of two dual binding posts).	\$33.00/set

EDISON-PRICE

The Edison-Price Music Posts are excellent direct replacements for five-way binding posts and mount in the standard two 1/2" holes on 3/4" centers. They are also machined from tellurium copper, accept bare wire (as large as #8 gauge), spade lugs and banana plugs, and are press-mounted on a lexan plate. The long version fits speaker cabinets up to 22mm (7/8") thick, (32mm or 15/16" without plate and washers) while the short version fits chassis up to 10mm (3/8") thick. Sound quality is right up there with the unplated Cardas posts, at a lower price! Tighten (but don't over-tighten!) with a large flat screwdriver or coin. Copper cleaner is recommended.

SKU#	Description	Price \$US
53461	Music Posts - 1 set (1 pair of dual binding posts) Short.	\$45.00/set
53462	Music Posts - 1 set (1 pair of dual binding posts) Long.	\$45.00/set

CARDAS/COLVER

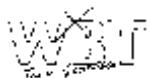


These binding posts offer the audiophile a significant improvement in transparency and detail as compared to standard gold-plated posts. (See Enid Lumley's comments in The Absolute Sound, Issue 57, Volume 13, p.175)

A beautifully made five way binding post, machined from tellurium copper. They are available in both an unplated version as well as silver/rhodium (post) and gold (nut) plated. These are also available in two lengths: short, for chassis thicknesses up to 4.5mm (0.175"), and long, for chassis or speaker thicknesses of 23mm (0.9") with washers, or 29mm (1-1/8") without washers. These also fit the standard 1/2" diameter holes on 3/4" centers, but can be individually mounted in a 5.5mm (7/32") diameter hole without the washers. Tighten with a 7/16" wrench. Copper cleaner is recommended for unplated versions.

SKU#	Description	Price \$US
53457	CCBP - short - unplated copper - 1 set (1 pair of dual binding posts)	\$49.00/set
53458	CCBP - long - unplated copper - 1 set (1 pair of dual binding posts)	\$54.00/set
53459	CCGR - short - silver/rhodium/gold plated - 1 set (1 pair of dual binding posts)	\$65.00/set
53460	CCGR - long - silver/rhodium/gold plated - 1 set (1 pair of dual binding posts)	\$85.00/set

WBT



The excellent level of quality of the WBT line extends from their RCA connectors to their output or speaker terminals and banana plugs. For details on the construction and materials of the Topline and Midline connectors, see the WBT section under RCA connectors.

The WBT 0730 and 0744 double pole terminals accept bare wire up to 5mm dia. (0.20" or approx. 4 awg), banana plugs and 6mm (1/4") spade lugs. (Note that spade lugs must be inserted from the side of the terminals.) The body is a one piece design for maximum conductivity and is keyed to prevent rotation while tightening. The knurled nut has a revolving pressure piece that prevents shear or rotational forces on the speaker cables while tightening. Both the 0730 and 0744 double pole terminals require two 10mm dia. mounting holes on 19mm centers (0.40" dia. on 0.75" centers) on wall thicknesses up to 6mm (0.24"). For thicker walls, especially on loudspeaker cabinets, the 0715 extensions allow mounting on wall thicknesses up to 50mm (2.0").

Topline Series

SKU#	Model	Description	Price \$US
55244	0730	Double pole terminal Binding Posts for up to 6mm (0.24") thick panels. Incl. Torx key. 1 set (1 pair of dual binding posts).	\$82.00/set

Midline Series

SKU#	Model	Description	Price \$US
55243	0744	Double pole terminal Binding Posts for up to 6mm (0.24"). 1 set (1 pair of dual binding posts) .	\$50.00/set

Terminal Extensions

SKU#	Model	Description	Price \$US
55276	0715	Allows the WBT 0730 and 0744 to be used in loudspeaker wall thicknesses up to 50mm (2"). Set of four.	\$26.00/set

CONNECTORS

SONIC FRONTIERS



Sonic Frontiers 5 Way Binding Posts - Type 1

As seen on the Sonic Frontiers SFC-1 Control Amplifier. These British-made beauties have several advantages over the "traditional" 5 way binding posts. "Traditional" binding posts have a small hole and use a polycarbonate base. These have a much larger hole so you can insert a larger gauge of wire, and they use a polypropylene base, which is a much better dielectric.

Also, the nuts back off much further than traditionally (more than 1/4") which allows you to fit 2 spades easily. In addition, there are slots in the end of the plastic nut which allows you to tighten them easily with a coin. As a direct low cost replacement for standard dual binding posts with 3/4" centers and 1/2" mounting holes, these can't be beaten!

SKU#	Description	Price \$US
53464	1 set (1 pair of dual binding posts)	\$14.95/set

Sonic Frontiers 5 Way Binding Posts - Type 2



The 30 A gold plated binding post as seen on a number of high-end products.

SKU#	Description	Price \$US
53466	1 set (1 pair of dual binding posts)	\$7.95/set

GROUND POST

VAMPIRE



Vampire Ground Post

Ground post that is excellent for pre-amp phono grounds, etc. Mounts in 0.25" (6mm) dia. hole in panels up to 0.25" (6mm) thick. 0.39"(10mm) dia. by 0.43" (11mm) long fluted nut. Hard gold plating over nickel over brass base metal. Includes solder lug, lock washer and nut. Sold in singles.

SKU#	Model	Price \$US
55449	BP-.5	\$7.50/ea.

SOLEN



Solen Binding Posts & Connector Housing

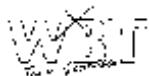
Sometimes while upgrading your speaker binding posts you find that changing the complete connector housing and binding posts together, is the easiest way to upgrade. And of course, at the same time you still want the quality of a solid brass gold plated post.

Solen Binding Posts & Connector Housing

SKU #	Model	Description	Price \$US
58833	Item A	Biwire, solid brass gold-plated binding posts. 3.8" x 2.9" (96mm x 75mm) hole.	\$10.50/ea.
58832	Item F	Solid brass gold-plated binding posts. 3" (76mm) round hole.	\$5.75/ea.

SPADES, PLUGS & PINS

WBT



WBT Banana Plugs

The 0600 and 0644 banana plugs are machined from a single piece of base material to eliminate unnecessary contact transitions and feature a central mandrel that expands the four-way split contact pins to ensure a tight contact in all banana jacks. They are both suitable for solder or crimp connections to cables of 2.5mm² to 16mm² cross section. A rear grub screw also provides cable strain relief. For details on the construction and materials of the Topline and Midline connectors, see the WBT section under RCA connectors.

Topline Series

SKU#	Model	Description	Price \$US
55275	0600	Locking Banana Plug for solder or crimp mount. Set of four incl. Torx key	\$120.00/set

Midline Series

SKU#	Model	Description	Price \$US
55279	0644	Locking Banana Plug for solder or crimp mount. Set of four incl. Torx key	\$48.00/set

SONIC FRONTIERS



SKU#	Description	Price \$US
53479	Locking banana plug, "WBT" style, gold plated with grey barrel, accepts 10 ga. bare wire screw, clamp connection, the top banana!	\$15.00/pr.

AUDIOQUEST



As an alternative to spades that look better than they sound, Audioquest makes a spade that sound better than the look.

SKU#	Description	Price \$US
53477	P-814 spade lug, direct gold plated OFHC copper. Fits 1/4" posts and 10-12 ga. wire. 0.060" (1.5mm) thick	\$7.50/pr.
53478	Spade lug, direct gold plated pure soft copper. Fits 1/4" posts and 10-12 ga. wire and most terminal strips! 1mm (0.04") thick	\$0.75/ea.

CARDAS/COLVER



SKU#	Description	Price \$US
53473	CCMS - unplated copper	\$16.00/pr
53474	CCMS - silver/rhodium plate	\$20.00/pr
53475	GRS - spade lugs, crimp on. gold/rhodium over copper, with brass compression sleeve	\$5.80/pr
	NOTE: CARDAS spade lugs may be filed down to the bare copper underneath for optimum use with the Music Posts and Cardas Posts.	
53476	CABD - double banana plug, accepts spade lug or can be soldered, silver/rhodium plated	\$46.00/pr
53177	Silver/rhodium speaker pin connector - solder mount	\$1.90/ea

VAMPIRE



Vampire Crimp Speaker Cable Connector

Made from copper then silver plated and finished with hard-gold plating.

SKU#	Description	Price \$US
55446	SPD Spade Lug for 1/4" binding post	\$2.50/pr.

CONNECTORS

SOLEN



SKU#	Description	Price \$US
58834	Banana plug, gold-plated solid brass.	\$2.00/ea.

GOERTZ



Goertz Rhodium Plated Terminals (Only used with Goertz Wire)

Premium quality, heavy, rhodium plated terminals with a slot to receive the cable. The slot is sufficiently wide to accept two conductors for bi-wiring. Two gold plated set screws are forced into the conductor for a secure, gas-tight fit.

Goertz Rhodium Plated Terminals

SKU #	Model #	Description	Price \$US
55248	GTZSPD	Heavy 0.80" (2mm) thick spade lug with 0.23" (6mm) wide opening. Slotted body with slotted cable opening and two gold plated set screws. Rhodium plated and colour coded. Set of four.	\$19.70/set.
55249	GTZBAN	Heavy spring loaded banana plug. Slotted body with slotted cable opening and two gold plated set screws. Rhodium plated and colour coded. Set of four.	\$19.70/set

KIMBER KABLE



Kimber Kable Post Master™

This is a patented premium grade spade-type connector. We highly recommend these especially if you decide to buy the Edison-Price Music Post. These connectors accommodate wire sizes from #16 to #6 gauge awg. The unique feature of this connector is the compressible silicone wafer fitted between its two parts. The wafer is designed to maintain constant dynamic pressure on the binding post with only "finger tight" torque. This prevents contact loss due to vibration or temperature changes. The ridges on the contact area concentrate contact pressure for a gas tight connection. The plating is the same UltraPlate™ as used on the Kimber RCA's. The "B" version is pure unplated copper.

SKU#	Description	Price \$US
53469	PM-25 Connector Kit (fits posts sizes .20" - .265" - most standard 1/4" binding posts)	\$16.00/pr
53471	PM-33 Connector Kit (fits posts sizes .28" - .345" - oversized binding posts)	\$16.00/pr
53470	PM-25B Connector Kit - Bare Copper (fits post sizes .20" - .265" - most standard 1/4" binding posts)	\$16.00/pr
53472	PM-33B Connector Kit - Bare Copper (fits post sizes .28" - .345" - oversized binding posts)	\$16.00/pr

Each Connector Kit comes with 6" Wonder Solder, heatshrink sleeves and one pair of connectors.

CARTRIDGE CLIPS & TONEARM CONNECTORS

VAN DEN HUL



Direct gold plated copper.

SKU#	Description	Price \$US
53482	Cartridge clips - direct gold plated copper, 1.2mm	\$2.50/ea.

CARDAS



Tonearm connectors. Gold plated pins with Teflon dielectric.

SKU#	Description	Price \$US
53480	RDIN - 5 pin DIN phono plug 90°	\$50.00/ea.
53481	SDIN - 5 pin DIN phono plug straight	\$32.00/ea.

WIRE & CABLE

Getting the music signal from one point to another would appear to be a straight forward task – use a piece of wire! This obviously works of course, but the question is how well? Not as well as we once thought, as it turns out. You have probably noticed all the advertisements for different interconnect and speaker cables – they all claim to be wonderful – and to be the only correct way of transferring your music signals from one piece of equipment to the next. They can't all be the best though, can they?

The truth is that the sound quality of various types and formulations of wires and cables is very much a system – dependent phenomena. What works well in

one system or is highly praised in a magazine review, may or may not bring you musical satisfaction in your system.

For the these reasons, The Parts Connection offers a selection of high quality, moderately priced cable and wire that we have found to work well in a wide variety of systems. While each cable type will have its own sonic character, and everyone has their own preferences, we have found all of the cables listed here to offer good value and to provide outstanding results when used in a complimentary system.

INTERCONNECT

KIMBER KABLE

Kimber Kable TG-B

The raw cable used in KCTG. Consisting of 6 braided 19 Ga. VariStrand™ hyper-pure silver conductors in a clear Teflon dielectric, KCTG is the one of the best interconnects available for either balanced or single-ended applications, in our opinion. Available by special order only, please allow two weeks.

SKU#	Description	Price \$US
51883	Kimber TG-B interconnect wire CL	\$100.00/ft*

Kimber Kable AG-B

The raw cable used in KCAG. Consisting of 3 braided 19 Ga. VariStrand™ hyper-pure silver conductors in a clear Teflon dielectric, the KCAG is ideal as either a balanced or single ended interconnect. Expensive, but rest assured that that this cable will provide a dramatic sonic difference in an upscale system.

SKU#	Description	Price \$US
51884	Kimber AG-B interconnect wire CL	\$50.00/ft*



Kimber Kable KC1

This interconnect cable binds KIMBER KABLE PSB (triple braid VariStrand™ TCSS) tightly in a semi-conductive non-metallic shield with a single drain wire in a blue jacket. The shield rejects all electrostatic noise, leaving it immune to outside RF interference without the usual magnetic interaction of a conventional shield. The most remarkable thing about the PSB triple braid is that the unique braiding technique preserves the signal integrity by minimizing interacting electromagnetic fields between conductors. KC1 delivers the razor sharp definition, speed, and transparency that Kimber Kable is famous for. Works very well in areas of high RFI/EMI where an unshielded interconnect may cause noise problems and as an internal hook-up wire For balanced and single ended applications. 6mm (0.24") outside dia.

SKU#	Description	Price \$US
51885	Kimber KC-1 interconnect wire BL	\$5.50/ft*

Kimber Kable Silver Streak

The new Kimber Silver Streak series of interconnect are hybrid silver/copper cables that offer much of the superior resolution and spaciousness of the AG series, at a significant cost savings over a full silver cable. The Silver streak series cables use the 19 ga. Varistrand silver conductor(s) for the signal lead, and the 19 ga. copper conductor(s) for ground.

Kimber Kable PSB (PBJ)

Our best selling interconnect! (And the best selling one world-wide, at last count!) PSB uses the same braid geometry as the highly praised KCAG, but uses VariStrand™ high purity copper conductors in a Teflon dielectric. It makes an excellent budget interconnect cable when used in areas where EMI/RFI is not a problem, but careful cable routing is recommended. Called PSB in bulk, it is the same as the pre-terminated PBJ interconnect. Amazingly neutral, spacious and detailed sounding at a "peanuts" price! (See Corey Greenberg's comments in Stereophile, Vol. 16 No. 7, July 1993, P. 127) See also the hook-up wire section for PSB in solid colors.

SKU#	Description	Price \$US
51887	Kimber PSB (PBJ) interconnect wire R/BL/BK	\$2.80/ft*

Kimber Kable SS-SE-B

The Silver Streak cable for single-ended RCA applications consists of one silver conductor for signal and two copper conductors for ground.

SKU#	Description	Price \$US
57170	Kimber Kable Silver Streak SE interconnect wire	\$18.30/ft*

* 1 foot = .305 meter

Kimber Kable SS-BAL-B

The Silver Streak cable for balanced XLR applications consists of two silver conductors, one each for signal positive and negative, and one copper conductor for ground.

SKU#	Description	Price \$US
57169	Kimber Kable Silver Streak-BAL interconnect wire	\$34.30/ft*

WIRE & CABLE

Kimber Kable Hero Pre-Terminated Interconnects

Hero audio interconnects utilize many advanced KIMBER KABLE technologies. Proven VariStrand conductor geometry, advanced metallurgy and manufacturing techniques, new GyroQuadratic field geometry, and Teflon based dielectrics, all combined in a cable that welcomes the listener into the performance.



RCA WBT-0144 termination (single-ended)

SKU	Length	Price \$US
58446	0.5m (1.6ft)	\$85.00
58447	1.0m (3.3ft)	\$110.00
58448	1.5m (4.9ft)	\$135.00
58449	2.0m (6.5ft)	\$160.00

RCA WBT-0108 termination (single-ended)

SKU	Length	Price \$US
58497	0.5m (1.6ft)	\$145.00
58450	1.0m (3.3ft)	\$170.00
58498	1.5m (4.9ft)	\$195.00
58451	2.0m (6.5ft)	\$220.00

XLR termination (balanced)

SKU	Length	Price \$US
58442	0.5m (1.6ft)	\$85.00
58443	1.0m (3.3ft)	\$110.00
58444	1.5m (4.9ft)	\$135.00
58445	2.0m (6.5ft)	\$160.00

ALPHA-CORE GOERTZ INTERCONNECTS



Pre-Terminated!!!

Yes, we've received a fair amount of feedback from our customers, and the consensus is, the Goertz interconnects are not easy to terminate! So, we've decided to offer factory pre-terminated cables, in the most popular lengths. Like the bigger Goertz Speaker cables, these interconnects are extremely neutral, with excellent bass portrayal.

Alpha-Core Goertz Copper Interconnect - Goertz Tourmaline RCA

SKU#	Length	Price \$U.S.
57575	0.5m (1.6ft)	\$69.00
57576	1.0m (3.3ft)	\$87.50
57577	1.5m (4.9ft)	\$105.00
57578	2.0m (6.5ft)	\$125.00

Alpha-Core Goertz Copper Interconnect - Goertz Tourmaline XLR

SKU#	Length	Price \$U.S.
57579	0.5m (1.0ft)	\$85.00
57580	1.0m (3.3ft)	\$132.50
57581	1.5m (4.9ft)	\$155.00
57582	2.0m (6.5ft)	\$177.50

Alpha-Core Goertz Silver Interconnect - Goertz Quartz Triode RCA

SKU#	Length	Price \$U.S.
57583	0.5m (1.6ft)	\$105.00
57584	1.0m (3.3ft)	\$155.00

Alpha-Core Goertz Silver Interconnect - Goertz Quartz Triode XLR

SKU#	Length	Price \$U.S.
57585	0.5m (1.0ft)	\$148.00
57586	1.0m (3.3ft)	\$204.00

Please Note: Longer or custom lengths are available, but will take up to 2-3 weeks for delivery. Please call for pricing details.

AUDIOQUEST



Audioquest TOPAZ x 2

Updated design with two 22 awg. polypropylene insulated LGC (Long Grain Copper) conductors in a polypropylene fiber filler. 100% coverage foil shield with drain wire in a Topaz brown PVC jacket. For single ended (unbalanced) applications only. 9mm (0.35") outside dia.

SKU#	Description	Price \$US
51895	AudioQuest Topaz x 2	\$3.10/ft*

Audioquest RUBY X 3

Now identical in construction to the Quartz X 3 (below) except that the conductors are 22 ga. FPC (Functionally Perfect Copper) Ruby red PVC outer jacket. For single ended or balanced applications. (mm (0.53") outside dia.

SKU#	Description	Price \$US
51896	AudioQuest Ruby x 2	\$4.80/ft*

Audioquest QUARTZ x 3

A fully balanced, shielded cable with three 22 awg FPC-6 (Functionally Pure Copper, 99.9999% purity) conductors with a primary polypropylene insulator on each conductor in a polypropylene fiber filler. 100% coverage foil shield with drain wire in a dark blue PVC jacket. For balanced applications. 9mm (0.35") outside dia.

SKU#	Description	Price \$US
51897	AudioQuest Quartz x 3	\$10.80/ft*

* 1 foot = .305 meter

CARDAS



Cardas Twinlink 5C

Two 15.5 awg high purity 49 strand multi-gauge copper litz wire conductors with Teflon jackets in a natural cotton fiber filler with a foil shield in a slate grey PVC outer jacket. Excellent as both an interconnect AND speaker cable where the shield is not used, OR as a shielded power cord. 9mm (0.35") outside dia. NOTE: Unless you have access to a solder pot or high temperature iron, we recommend that you have us cut to length and pre-tin the Cardas 15.5 as the litz enamel coating on the individual strands is difficult to remove. \$2.00 per double ended piece.

SKU#	Description	Price \$US
51978	Cardas Twinlink 5C 2 x 15.5 awg. with shield	\$6.90/ft*

Cardas Twin-Axial

Two 21.5 awg. high purity 39 strand multi-gauge copper litz wire conductors with Teflon jackets in a natural cotton fiber filler with shield in a dark blue PVC outer jacket. Excellent as both an interconnect cable and as a shielded internal signal wire. 5.5mm (0.22") outside dia. (DC resistance = 0.02 ohms/ft)

SKU#	Description	Price \$US
51898	Cardas 2 x 21.5 Twinaxial with shield	\$5.50/ft*

Cardas Crosslink Interconnect

Four 19.5 awg. pure copper 68 discrete conductors, jacketed in Teflon and double shielded all in a cable that is 0.305" in diameter.

SKU#	Description	Price \$US
58930	Cardas Crosslink-Interconnect 2 x 19.5 awg	\$6.50/ft*

Cardas 2 x 24 Twin-Ax

Two 23.5 awg. high purity 16 strand multi-gauge copper litz wire conductors with Teflon jackets in a Teflon sleeve with shield in a light blue PVC outer jacket. Excellent as both a tonearm cable where its' flexibility will not interfere with turntable suspensions and as a shielded internal signal wire. 3mm (0.12") outside dia.

SKU#	Description	Price \$US
51900	Cardas 2 x 24 Twinaxial w/shield - Twin Link 23.5 awg	\$2.75/ft*

Cardas Co-Axial

One 21.5 awg high purity 39 strand multi-gauge copper litz wire conductor with a Teflon jacket and natural cotton fiber filler with shield in a dark blue PVC outer jacket. 5.5mm (0.22") outside dia.

SKU#	Description	Price \$US
51899	Cardas 1 x 21.5 Coaxial	\$3.50/ft*

D.H. LABS



D.H. Labs Silver Sonic Interconnect

The D.H. Labs Silver Sonic BL-1 interconnect cable is an excellent budget cable using the highest quality materials. The BL-1 is a balanced design with a full coverage foil shield for minimum noise pick-up and can be used for both single ended RCA and balanced XLR applications. The conductors are large 20 ga stranded slow drawn oxygen free copper with a pure silver coating. The conductors are insulated in a special Teflon copolymer with a dark blue PVC outer jacket. The D.H. Labs BL-1 interconnect mates very well with our "Tiffany" style RCA connectors, making a premium audio interconnect cable within the reach of those on even the tightest budget!

SKU#	Description	Price \$US
57225	D.H. Labs BL-1 Silver Sonic interconnect cable	\$3.50/ft*

HOOK-UP WIRE

WONDERWIRE



A perennial favorite! 19 awg., solid core construction of silver coated high-purity copper with Wonder's proprietary crystal structure, new "C" version, bare wire, uninsulated. Recommended for signal or power supply wiring.

SKU#	Description	Price \$US
51977	Wonder Wire 19 awg. solid core hook-up wire, uninsulated	\$0.55/ft*

* 1 foot = .305 meter

WIRE & CABLE

CARDAS

Cardas Hook-up Wire

With George Cardas' exclusive Golden Section Stranding, the Cardas hook up wire line has been a perennial favorite among audiophiles. All Cardas hook-up wires feature 99.999% pure copper litz wire with the Golden Section multi-gauge stranding, with pure Teflon dielectric. (With the exception of the 33 awg. tonearm wire, which uses PVC insulation for flexibility) The 11.5 awg. is excellent for internal wiring of woofers in speakers, and for high level signal and power supply wiring in electronics. 15.5 awg. is suitable for woofer/midrange wiring in speakers, and can be combined with 19.5 awg. for full range applications. 17 awg. is useful for tweeter wiring, as well as power supply wiring, especially in pre-amps, etc. 19.5 is recommended for tweeter wiring and most line level signal path applications. 21.5 and 23.5 awg. are suitable for lower level signal applications, especially in phono pre-amps. Many D.I.Y.ers will use the 11.5, 15.5 and 19.5 (or similar combination) paralleled together and twisted as a speaker cable! Please note that for 17awg and larger, it is recommended that the wires be cut to length and pre-tinned using a solder pot, as the enameled litz wire construction makes them difficult to terminate by any other method. \$2.00 per two ended piece.

SKU#	Description	Price \$US
52934	Cardas 11.5 awg. hook-up wire RED	\$3.90/ft*
52935	Cardas 11.5 awg. hook-up wire BLACK	\$3.90/ft*
52930	Cardas 15.5 awg. hook-up wire RED	\$2.50/ft*
52931	Cardas 15.5 awg. hook-up wire BLUE	\$2.50/ft*
52932	Cardas 15.5 awg. hook-up wire GREEN	\$2.50/ft*
52933	Cardas 15.5 awg. hook-up wire BLACK	\$2.50/ft*
51941	Cardas 15.5 awg. hook-up wire WHITE	\$2.50/ft*
51942	Cardas 17.5 awg. hook-up wire BLUE	\$2.10/ft*
51943	Cardas 17.5 awg. hook-up wire RED	\$2.10/ft*
52936	Cardas 19.5 awg. hook-up wire WHITE	\$1.90/ft*
52938	Cardas 19.5 awg. hook-up wire BLACK	\$1.90/ft*
52937	Cardas 21.5 awg. hook-up wire BLUE	\$1.70/ft*
51944	Cardas 21.5 awg. hook-up wire BLACK	\$1.70/ft*
57247	Cardas 23.5 awg. hook-up wire GREEN	\$1.50/ft*
51946	Cardas 33 awg. tonearm wire BLUE	\$1.50/ft*



KIMBER KABLE

Kimber Kable TCSS

The individual conductor used in PBJ and KC-1, this internal hook-up wire is a multi-gauge, multi-stranded contaminant-free copper alloy wire with the best teflon dielectric coating you can find. Due to their unique manufacturing techniques incorporating VariStrandTM, KIMBER KABLE has a skin-to-core density much higher than that of other wires, thus generating higher performance. 19 awg.

SKU#	Description	Price \$US
51903	Kimber TCSS 19 awg. hook-up wire WHITE	\$0.68/ft*
51904	Kimber TCSS 19 awg. hook-up wire BLUE	\$0.68/ft*
51905	Kimber TCSS 19 awg. hook-up wire BLACK	\$0.68/ft*
51906	Kimber TCSS 19 awg. hook-up wire RED	\$0.68/ft*
51907	Kimber TCSS 19 awg. hook-up wire YELLOW	\$0.68/ft*
51908	Kimber TCSS 19 awg. hook-up wire GREEN	\$0.68/ft*
51909	Kimber TCSS 19 awg. hook-up wire ORANGE	\$0.68/ft*

Kimber Kable TCSS Twisted Pair

Two strands of TCSS twisted together in a tight spiral. Excellent as a semi-shielded internal hook-up wire, especially in pre-amps, where the extra conductor (black) is connected at one end (usually the input end) only.

SKU#	Description	Price \$US
51910	Kimber TCSS Twisted Pair hook-up wire WHITE/BLACK	\$1.45/ft*
51911	Kimber TCSS Twisted Pair hook-up wire RED/BLACK	\$1.45/ft*

Kimber Kable TCX

Three bundles of seven strand TCSS copper spiralled together in a thick teflon jacket. Excellent for high current applications such as power amp output wiring, internal speaker wiring, and hard-wiring crossovers. For internal speaker wiring, tightly twist together two lengths with an electric drill to make a twisted pair.

SKU#	Description	Price \$US
51912	Kimber TCX 15 awg. hook-up wire RED	\$2.00/ft*
51913	Kimber TCX 15 awg. hook-up wire BLACK	\$2.00/ft*
54519	Kimber TCX 15 awg. hook-up wire BLUE	\$2.00/ft*
54520	Kimber TCX 15 awg. hook-up wire YELLOW	\$2.00/ft*

KIMBER KABLE

KIMBER KABLE

Kimber Kable AGSS

The individual conductor used in KCAG and KCTG, a 19 awg VariStrandTM hyper-pure silver conductor in a clear teflon dielectric. Excellent as a chassis hook-up wire, especially when made into a twisted pair with Kimber TCSS as a ground/shield conductor.

NOTE: Colors subject to availability. Please give us alternative color preferences or a substitution of our choice will be supplied.

SKU#	Description	Price \$US
51902	Kimber Kable AGSS 19 awg. hook-up wire	\$16.80/ft*

Kimber Kable AGSC

A 25 awg. solid core hyper-pure silver conductor with a clear teflon dielectric. Excellent as a hook-up wire for low level signals.

SKU#	Description	Price \$US
51901	Kimber AGSC 25 awg. hook-up wire	\$10.00/ft*

Kimber Kable Solid Core Hook-Up Wires

SKU	Description	Price \$US
58460	SF24-clear Single #24 flat solid core Hyper-Pure Copper with pure virgin Teflon insulating dielectric	\$1.20/ft*
58461	DTC23-red Single #23 solid core Hyper-Pure Copper with Dula	\$1.40/ft*
58462	DTC23-orange density Teflon Composite (DTC) insulating dielectric	\$1.40/ft*
58463	DTC23-twist The above DTC-23 red /orange twist.	\$3.20/ft*
58464	TCSS-4 braid Four wire braid using VariStrand Hyper-Pure copper conductors with Teflon Composite (CT) insulating dielectric	\$3.80/ft*

* 1 foot = .305 meter

D.H. LABS

DH LABS

D. H. Labs' wires have been very popular, so popular that we wanted to offer you a few more options while doing your latest upgrade/modification projects. So let us unroll some for you.

SILVER SONIC High Performance Series - Stranded Hook up Wire

Silver Sonic hook up wires are manufactured with their custom ultra-pure silver coated OFC copper for the most critical signal path applications.

SKU#	Description	Price \$US
52728	OFH-20 20 gauge stranded silver hookup, RED	\$0.85/ft*
54496	OFH-20 20 gauge stranded silver hookup, BLACK	\$0.85/ft*
51974	OFH-14 14 gauge stranded silver hookup, RED	\$1.50/ft*
54497	OFH-14 14 gauge stranded silver hookup, BLACK	\$1.50/ft*

Standard Series - Stranded and Solid Core Hook up Wire

D. H. LABS Teflon hook up wires are manufactured with high purity annealed, silver plated copper. They are excellent for both signal path and power supply wiring.

SKU#	Description	Price \$US
51951	SH-22, 22 gauge stranded silver hookup, RED	\$0.35/ft*
52724	SH-22, 22 gauge stranded silver hookup, BLACK	\$0.35/ft*
54927	SH-18, 18 gauge stranded silver hookup, RED	\$0.55/ft*
54968	SH-18, 18 gauge stranded silver hookup, BLACK	\$0.55/ft*
58901	SH-20/solid, 20 gauge solid core silver hookup, BLACK	\$0.40/ft*

TONE ARM WIRE**DISCOVERY*****Discovery Cable*****Discovery 28Ga.**

Tonearm wiring as used by Air Tangent, Immedia, and optional on Graham 1.5 and Eminent Technology. 65 strand high purity copper, 3-4 mil Teflon insulation. If you're not using Discovery tonearm wire you're just not getting all of the music from your LP's!

SKU#	Description	Price \$US
51928	Discovery 28 awg. tonearm wire RED	\$3.00/ft*
51929	Discovery 28 awg. tonearm wire GREEN	\$3.00/ft*
51930	Discovery 28 awg. tonearm wire BLUE	\$3.00/ft*
51931	Discovery 28 awg. tonearm wire WHITE	\$3.00/ft*

* 1 foot = .305 meter

WIRE & CABLE

LOUDSPEAKER CABLE

KIMBER KABLE

AudioQuest Type 4

This cable uses four 18 awg. LGC (Long Grain Copper) conductors with polyethylene dielectric spiralled in a Hyperlitz configuration for an aggregate size of 15 awg. Dark blue PVC jacket. A budget performer! Also works very well as a two conductor AC cable.

SKU#	Description	Price \$US
51984	AudioQuest Type 4 speaker cable	\$2.50/ft*



A long-time favorite of many audiophiles, the Kimber Kable line of speaker cables continues to rank as one of the best values in a high-end speaker cable. Characterized by its' open, detailed, soundstage, pinpoint sense of imaging, and neutral tonal balance. With their high-purity copper conductors and Teflon dielectric, you can be sure that any Kimber Kable model will provide a very long service life.

Kimber Kable 4AG

4AG consists of eight hyper-pure silver VariStrand conductors in a braided configuration. Like the KCAG interconnect, this silver cable offers superb performance, especially when used for the mid/highs with 8TC in a bi-wire/bi-amp system. Clear dielectric lets the silver shine through! By special order only, please allow 2 weeks.

SKU#	Description	Price \$US
51979	Kimber Kable 4AG silver speaker cable	\$120.00/ft*

Kimber Kable 8TC

8TC consists of 16 individual TCSS conductors in a large braid format with an aggregate size of two x #9 awg. Great as a full range cable or is excellent for low frequencies when used with 4TC or 4AG in a bi-wired or bi-amped system. Blue/Black

SKU#	Description	Price \$US
51980	Kimber Kable 8TC speaker cable	\$10.00/ft*

Kimber Kable 4TC

4TC consists of eight individual TC conductors in a braided format. Aggregate size is two X #13 awg. Great used full-range in shorter runs, (< 10 ft.) or for mid-high frequencies with 8TC in a bi-wired or bi-amped system. Blue/Black

SKU#	Description	Price \$US
51981	Kimber Kable 4TC speaker cable	\$6.00/ft*

AUDIOQUEST



AudioQuest Crystal 2

This cable uses twelve solid-core conductors with polyethylene dielectric spiralled together in a Hyperlitz array around a fiber core in a slate blue PVC jacket. Six conductors are 19 awg OFHC (Oxygen-Free High Conductivity) copper and six are 20 awg FPC (Functionally Perfect Copper) for an aggregate size of 12 awg. Works extremely well as a single bi-wire cable. Use four (or six) FPC conductors for mid-treble and the rest for bass.

SKU#	Description	Price \$US
51983	AudioQuest Crystal 2 speaker cable	\$10.00/ft*

* 1 foot = .305 meter

GOERTZ SPEAKER CABLE



The Goertz MI series of speaker cables have been very popular with our customers since their introduction last year. In our initial evaluations, Goertz provided exceptional results in EVERY system we have tried it in, with its characteristic smoothness, dynamics, detail, and spaciousness. It bettered MUCH more expensive cables in a variety of systems with dynamic, electrostatic, and planar magnetic loudspeakers, and many different (usually tubed) amplifiers. The most often heard comment was that it sounded like no cable at all, just hook it up, forget about it, and enjoy the music!

The design goal of the Goertz MI series was to create a cable of low characteristic impedance,¹ in the order of 2 to 4 Ohms, similar to loudspeaker impedances. This low characteristic impedance was attained by using flat, thin, solid core conductors individually jacketed in Polyester Terephthalate (and Teflon in the MI 2) sandwiched together with a 0.003" (0.08mm) spacing, and covered with a common sheath of polycarbonate (LEXAN). This construction creates a cable of moderate capacitance, but very low inductance, and thus its low characteristic impedance. It also results in the virtual elimination of skin effect, microphonics from cable strand interaction, emitted EMF, hum pick-up from adjacent power wiring, and high frequency rolloff. An additional advantage of the Goertz MI flat construction is that it is easily hidden under carpeting or rugs, behind baseboards, or otherwise, for an excellent SOAF. (Significant Other Acceptance Factor!)

¹ Characteristic impedance is the term defined as the square root of inductance divided by capacitance (L/C) and is dependent on the geometry of a cable (or connector) and its materials, but is INDEPENDENT of length.

Goertz MI Series Speaker Cables

SKU #	Model #	Description	Price \$US
55246	MI 1	13 awg. high purity oxygen free solid core copper. 0.4" (10mm) wide by 0.04" (1mm) thick. DC resistance 0.0044 ohm/ft, capacitance 0.5nF/ft., inductance 10nH/ft. Characteristic impedance approx. 4 ohms.	\$4.20/ft*
55247	MI 2	10 awg. high purity oxygen free solid core copper. 0.8" (10mm) wide by 0.04" (1mm) thick. DC resistance 0.0022 ohm/ft, capacitance 0.95nF/ft., inductance 6nH/ft. Characteristic impedance approx. 2.5 ohms.	\$7.90/ft*

See Connector Section for Goertz Rhodium Plated Terminals, designed to receive the flat Goertz cable.



SKU #	Description	Price \$US
58545	Goertz HT Speaker Cable	\$3.00/ft*
58547	Goertz HT Spade Cutter	\$49.95/ea
58546	High Fidelity Silver Spade Kit (Includes: Silver Spades, Silver Solder, Tubing)	\$40.00/pr

D.H. LABS



D.H.Labs Silver Sonic T-14 Speaker Cable

The D.H.Labs Silver Sonic T-14 High Resolution speaker cable was designed to provide high quality sound on a wide range of equipment at a price your pocket-book will love!

The Silver Sonic T-14 starts with strands of high purity OFC copper, individually coated with a thick layer of silver. The strands are then tightly wound into 14 ga bundles and extruded with DuPont TFE, the highest grade of Teflon for a low dissipation factor. Vibration damping fillers and a tensioned spiral wrap under the PVC jacket hold the conductors tightly in place to minimize resonance and microphonic effects. Every spool of T-14 is tested for several parameters, and the primary insulation is inspected for pinholes to eliminate the possibility of conductor oxidation.

Silver Sonic T-14 has a low inductance and capacitance of only 21.5 pF per foot, making it an excellent choice for both tubed and solid state amplifiers, and gives consistent performance with a wide range of loudspeakers.

SKU#	Description	Price \$US
57227	D.H. Labs Silver Sonic T-14 14 ga. speaker cable	\$4.25/ft*

* 1 foot = .305 meter

WIRE & CABLE

DIGITAL INTERCONNECT

KIMBER KABLE



ILLUMINATI



OptiLink

Shatterproof polymer fiber Tos-Link optical interconnect cable featuring precision polished ends for minimal reflectivity, and damped outer jacket. Very flexible.

SKU#	Description	Price \$US
52863	Kimber OPT-1 1.0m OptiLink TosLink digital cable	\$50.00/ea.

VAN DEN HUL



van den Hul AES/EBU 110

A dedicated 110 Ohm characteristic impedance cable for the AES/EBU balanced digital data transmission standard. Two 18 awg , 42 strand internal conductors with a dense polyethylene jacket and treated fiber filler and double shielded with a treated reinforced aluminum foil together with a 120 strand silver plated OFC copper braided shield. White 7.25mm (0.29") dia. HULLIFLEX outer jacket.

SKU#	Description	Price \$US
52943	van den Hul AES/EBU 110 Ohm digital cable	\$8.50/ft*

van den Hul VideoLink 75

A 75 Ohm characteristic impedance cable that is excellent as a digital interconnect AND video cable. The center conductor is 12 strands of a 0.15mm dia. pure silver coated matched crystal OFC copper with a high density polyethylene insulator. Double shielded with a 96 strand silver plated matched crystal OFC copper braid outer layer and a Teflon coated aluminum foil. 7mm (0.28") dia light blue HULLIFLEX outer jacket. Makes an excellent co-ax digital interconnect, especially when terminated with 75 Ohm BNC connectors, it will also surprise you with the improvement in picture quality when used as a composite video cable in your home theater system.

SKU#	Description	Price \$US
52942	van den Hul VideoLink 75 digital/video cable	\$7.50/ft*

* 1 foot = .305 meter

Illuminati DV-30

DataVideoFlex – A precision 75 Ohm co-ax cable with a pure copper center conductor, foamed Teflon dielectric, tinned copper braided shield, and a pure Teflon jacket. Excellent as a digital cable, especially with 75 Ohm BNC connectors, and as a composite video cable.

SKU#	Description	Price \$US
55976	Illuminati DV-30 DataVideoFlex 75 Ohm 1.0m RCA Terminated	\$70.00/ea
56481	Illuminati DV-30 DataVideoFlex 75 Ohm 1.0m BNC Terminated	\$70.00/ea
57457	Illuminati DV-30 DataVideoFlex 75 Ohm 0.5m BNC Terminated	\$55.00/ea
57291	Illuminati DV-30 DataVideoFlex 75 Ohm 0.5m RCA Terminated	\$55.00/ea

Illuminati DV-75

The newest 75ohm cable that gives most of the performance of the D-60. It's a great choice for critical video and digital applications including DVD.

SKU#	Description	Price \$US
58563	Illuminati DV-75 DataVideoFlex 75 Ohm 0.5m BNC Terminated	\$102.50/ea
58564	Illuminati DV-75 DataVideoFlex 75 Ohm 0.5m RCA Terminated	\$102.50/ea
58565	Illuminati DV-75 DataVideoFlex 75 Ohm 1.0m BNC Terminated	\$165.00/ea
58566	Illuminati DV-75 DataVideoFlex 75 Ohm 1.0m RCA Terminated	\$165.00/ea

Illuminati D-60

The D-60 features a unique Hyper-pure silver conductor contained in an articulated Teflon dielectric.

SKU#	Description	Price \$US
58530	Illuminati 0.5m BNC Terminated	\$212.50/ea
58564	Illuminati 0.5m RCA Terminated	\$212.50/ea
58565	Illuminati 1.0m BNC Terminated	\$265.00/ea
58566	Illuminati 1.0m RCA Terminated	\$265.00/ea

Illuminati V-20

75ohm RG59 coax cable with a pure copper conductor which is insulated with a foamed dielectric.

SKU#	Description	Price \$US
58571	Illuminati V-20 RG59 video interconnect	\$1.83/ft*

Illuminati DX-50 (con't)

DataFlex AES/EBU: Precision 110 ohm cable utilizing "XLR" type connectors. Twin conductors in a twisted configuration, with multi-laminated, insulated jacket and woven shield plus drain wire. Available in 1.5M only.

This is the one from KIMBER KABLE that everyone wants!

SKU#	Description	Old Price	Sale Price \$US
55968	110 Ohm AES/EBU Digital 1.5 m	\$299.00	\$120.00

D.H. LABS DIGITAL**D.H.Labs D-75 and D-110 Digital Interconnect**

The D.H.Labs D-75 and D-110 digital interconnect cables offer the same excellent quality and value as their BL-1 analog interconnect and T-14 speaker cable. The D-75 75 Ohm digital coax cable features a solid pure copper center conductor for the most uniform impedance, with a large cell foamed Teflon dielectric for an extremely low dielectric absorption. The D-75 also features a two layer shield, consisting of a 100% coverage aluminized mylar shield and heavy 98% tinned copper braid for low ground resistance. Works well with RCA termination or use BNC connectors for optimum 75 Ohm characteristic impedance. The D-110 110 Ohm AES/EBU balanced digital cable features silver coated conductors in a pure Teflon dielectric with a 100% shield and a solid spacer for constant impedance.

SKU#	Description	Price \$U.S.
57228	D.H. Labs Silver Sonic D-75 co-ax digital interconnect cable	\$4.50/ft*
57226	D.H. Labs Silver Sonic D-110 balanced AES/EBU digital interconnect cable	\$5.00/ft*

**SONIC FRONTIERS****I²S•enhanced Digital Cable**

The I²S-e interface solves this problem by transmitting the clock and data signals along separate conductors. A protocol very similar to the Philips I²S bus is used for audio data and clocks while the complete channel status and user bits are transmitted separately. In addition, the I²S-e allows the master clock to be generated in the receiving product with the transmitting product operating as a slave. Full compatibility with various consumer and professional products is achieved.

For example, both 384xfs and 256xfs based CD (or DVD) players are compatible. Sampling frequencies of today's 32k, 44.1k, 48k products as well as the future 88.2k and 96k rates are allowed. The transmission cable is specified as the 13W3, which contains 3 coax conductors and 5 twisted pair conductors. Motorola PECL high speed driver/receiver technology is specified to achieve clock risetime speeds on the order of 1 nanosecond.

As you can understand, this damped outer jacket cable is only available with pre-terminated ends. Providing for the minimal reflectivity of the digital signals, and low jitter!

SKU#	Description	Price \$US
57990	Sonic Frontiers I ² S•enhanced Digital Cable 1.5m	\$99.00/ea

DIGITAL HOOK-UP**ILLUMINATI**

* 1 foot = .305 meter

**Digital Hook-up Wire
Ohm-aha!**

A 75 Ohm characteristic impedance, thin co-axial hook-up wire for connecting co-ax digital input and output jacks to circuit boards. Uses a 30 awg. silver plated copper solid core center conductor, air/teflon dielectric, and aluminized polyester shield with drain wire. 1.5mm (0.060") outside diameter with a green teflon jacket. Easy to install, and makes a clearly noticeable improvement when used with 75 ohm connectors and digital interconnect. Great upgrade for the Assemblage DAC-1 when used with a 75 Ohm BNC connector! Comes in a "mini-kit" with two 8" pieces (one for the DAC and one for the transport), instructions, and a piece of Wonder Solder. Suggested minimum length for use is 6" (150mm)

SKU#	Description	Price \$US
55977	Illuminati Ohm-aha! digital hook-up wire mini-kit.	\$7.00/kit

AC WIRE, PLUGS & SOCKETS

A clean, low impedance AC power source is essential for a system or component to live up to its true potential. Dedicated power lines to your system from your house's main panel, as well as a number of the AC line conditioners available today, can make a major improvement in AC quality, with sometimes surprisingly big resultant improvements in sound quality from your system. This philosophy of clean

AC extends to the AC line cords on components, wall receptacles, and all other AC connections.

A number of loudspeaker cables will also work well as an AC cable, see the AudioQuest Type 4 and Cardas TwinLink 5C cables in the Speaker Cable section.

IMPORTANT NOTE:(And standard disclaimer of responsibility!) If you are planning to modify ANY AC wiring, be sure that the AC power is SHUT OFF at the breaker panel! If you have any doubt about the safety procedures involved, we STRONGLY recommend that you hire a licensed electrician to do the work for you.

AUDIOQUEST



AC-12

A high-current power cord that features eight 18 awg solid core LGC (Long Grain Copper) conductors with a primary PVC dielectric in a spiralled Hyperlitz configuration around a 12 awg stranded (19 x 25 awg) LGC ground or "earth" conductor. This is encased in a mylar wrapper for flexibility with a brown PVC jacket. 12 awg. overall cross section. 7/16" (11mm) outside dia. NOTE: AC-12 is too large to terminate to most IEC connectors. Use with the Hubbell 20 amp connectors and Hospital grade plugs.

SKU#	Description	Price \$US
52760	AudioQuest AC-12 Power Cord	\$6.00/ft*

AC-15

A 15 awg AC cable using six 18 awg LGC conductors with primary PVC insulation wound in a spiralled Hyperlitz configuration around a fiber core. This is encased in a mylar wrapper for flexibility with a dark blue PVC jacket. 3/8" (9.5mm) outside dia.

SKU#	Description	Price \$US
52761	AudioQuest AC-15 Power Cord	\$3.00/ft*

AudioQuest RF Stopper

0.5" (12mm) I.D. x 1.0" (25mm) O.D. x 1" (25mm) long ferrite ring for use on AC cords to filter high frequency noise on the AC line. Includes 2.5" (64mm) long shrink wrap for mounting to cable. Mount near equipment end of power cord.

SKU#	Description	Price \$US
52962	AudioQuest RF Stopper	\$15.00 ea.

HUBBELL

No, not the space telescope! Hubbell is the first name in premium and hospital grade AC connectors, and are used by the majority of high-end power cord manufacturers.



Hubbell 8215CT

Hospital grade straight AC plug. Heavy duty nylon construction for impact resistance, individual chambers for each wiring terminal, no-slip cable grip jaws prevents strain on wiring terminals, and of course, the see through "picture window" case that lets you see if the wires are inserted correctly.

SKU#	Description	Price \$US
53537	Hubbell 8215CT Hospital Grade AC Plug Straight	\$22.50 ea.

Hubbell 8215CAT

As above but with 90 degree cable exit that can be above, below, or to either side of the receptacle.

SKU#	Description	Price \$US
53536	Hubbell 8215CAT Hospital Grade AC Plug 90 Degree	\$20.50 ea.

Hubbell 5965VBLK

Black nylon "clamshell" style AC plug with screw terminals. NEMA 5-15P standard three prong.

SKU#	Description	Price \$US
53667	Hubbell 5965VBLK Clamshell 3 Prong AC Plug	\$9.50 ea.

Hubbell 5865VY

Yellow nylon "clamshell" style NON-POLARIZED (both prongs are the same size) AC plug with screw terminals. Allows you to try both plug polarities on non-grounded equipment.

SKU#	Description	Price \$US
52948	Hubbell 5865VY Clamshell Non-Polarized 2 Prong AC Plug	\$6.50 ea.

* 1 foot = .305 meter



Hubbell H320C

20 Amp female plug for end of power cord, straight, clamshell type case. Higher contact pressure and current rating than standard IEC female. MUST be used with H320B socket (below).

SKU#	Description	Price \$US
53533	Hubbell H320C Clamshell 20A female IEC plug	\$12.50 ea.

Hubbell H320B

20 Amp male chassis mount jack for use with H320C (above). Requires larger chassis opening (1-5/16" x 15/16" (33mm x 24mm) than standard IEC female.

SKU#	Description	Price \$US
53534	Hubbell H320B male 20A chassis mount jack.	\$10.00 ea.



Hubbell 8200W

Hospital grade AC duplex receptacle. Higher contact pressure than standard AC receptacles with superior ground integrity. (One piece nickel plated brass mounting strap and ground contact.) High impact thermoplastic face and thick walled molded base. The Hubbell 8200 is the finest quality AC receptacle available. White face.

SKU#	Description	Price \$US
53665	Hubbell 8200W hospital grade AC receptacle	\$22.50 ea.

Hubbell IG8200

Hospital grade AC duplex receptacle as above but with ground connection isolated from outlet box for greater ground purity. (Depending on the quality of the ground in your house wiring) Requires separate ground wire. Orange face.

SKU#	Description	Price \$US
53664	Hubbell IG8200 hospital grade iso. ground AC receptacle	\$32.50 ea.

Hubbell 5252W

"Spec" grade AC duplex receptacle similar to 8200 above but without high-impact face and base. Still higher contact pressure and ground integrity than standard receptacles. White face.

SKU#	Description	Price \$US
53666	Hubbell Spec. Grade AC Receptacle	\$9.00 ea.

IEC CONNECTORS

IEC Female Plugs

10A 250V standard IEC female cable mount connector as used by a number of cable manufacturers.

SKU#	Description	Price \$US
53539	IEC female cable mount plug	\$7.50 ea.

IEC Socket

10A 125V IEC male chassis mount socket for female plug above. Unfiltered.

SKU#	Description	Price \$US
55033	IEC male chassis mount socket unfiltered	\$1.95 ea.

IEC Socket

1A 250V IEC male chassis mount socket with PI type EMI/RFI filter with 3" (76mm) flying leads.

SKU#	Description	Price \$US
53541	IEC male chassis mount EMI/RFI filtered socket, 3" flying leads	\$5.95 ea.



PowerCon - Locking 3-pole Equipment Mains Connector System

Over the years a gap between low cost non-locking CEE connectors and expensive very large 3-phase power plugs has become apparent. Professional AV-users, Test and Measurement, computer and industrial customers have required a new locking mains equipment connector. The requested specifications gave rise to the PowerCon.

This 250Vac 20A rated twist-lock mains connector is the latest. It is not much larger in diameter than an XLR connector. The O.D. of the male part is only 1.016"(25.8mm), and it accepts cable O.D.'s up to 12 awg or standard 5/16"(15mm), or 12 awg wire! (15mm), or 12 awg wire, which are fastened via a screw type of connection to a multiple contact finger for highest connecting integrity. More nice features - a pre-mating safety ground conductor, and approvals from UL, VDE, and SEV. Note that these parts are mounted and connect to the equipment end of the power cord.

SKU#	Description	Price \$US
58915	NAC3FCA Neutrik Male wire connector	\$7.00 ea
58916	NAC3FCA Neutrik Female chassis mount	\$4.00 ea

SONIC FRONTIERS STRAIN RELIEFS



4 piece high impact plastic cable strain reliefs for chassis mounting. Rubber internal liner and collet-type locking ring.

SKU#	Description	Price \$US
53542	1/4" (6mm) I.D. chassis mount strain relief	\$4.75 ea.
52874	3/8" (9mm) I.D. chassis mount strain relief	\$5.00 ea.
53544	3/4" (19mm) I.D. chassis mount strain relief	\$6.00 ea.
53545	1/2" (12mm) I.D. chassis mount strain relief with 2" (51mm) long spiral cable support	\$5.50 ea.

CHASSIS & DAMPENING MATERIALS

HAMMOND CHASSIS



The perfect starting point for your DIY power amp or other projects are the Hammond 1441 (steel) and 1444 (aluminum) series chassis. These blank chassis have the following features:

- Heavy duty spot-welded construction
- Covers punched with 4 holes
- 0.40" (10mm) flange on bottom lip of chassis
- Steel models painted with ASA 61 grey baked enamel
- Aluminum models natural finish

Hammond 1441 Series Steel Chassis

Chassis SKU #	Model #	Dimensions inches (mm)			Thickness	Weight (Kg)	Price \$US
		Length	Width	Height			
56032	1441-12	7"(178)	5"(127)	2"(51)	0.040"(1)	0.45	\$9.00
56033	1431-12	Bottom Cover for above				0.45	\$4.00
56034	1441-16	10"(254)	6"(152)	2"(51)	0.040"(1)	0.90	\$12.00
56035	1431-16	Bottom Cover for above				0.45	\$6.00
56036	1441-22	12"(305)	8"(203)	2"(51)	0.051"(1.3)	0.90	\$19.00
56037	1431-22	Bottom Cover for above				0.45	\$9.00
56038	1441-32	17"(432)	10"(254)	3"(76)	0.051"(1.3)	1.80	\$22.00
56039	1431-30	Bottom Cover for above				0.90	\$9.00

Hammond 1444 Series Aluminum Chassis

Chassis SKU #	Model #	Dimensions inches (mm)			Thickness	Weight (Kg)	Price \$US
		Length	Width	Height			
56040	1444-12	7"(178)	5"(127)	2"(51)	0.040"(1)	0.45	\$9.00
56041	1434-12	Bottom Cover for above				0.23	\$4.00
56042	1444-16	10"(254)	6"(152)	2"(51)	0.040"(1)	0.45	\$11.00
56043	1434-16	Bottom Cover for above				0.23	\$6.00
56044	1444-22	12"(305)	8"(203)	2"(51)	0.051"(1.3)	0.45	\$18.00
56045	1434-22	Bottom Cover for above				0.23	\$8.00
56046	1444-32	17"(432)	10"(254)	3"(76)	0.051"(1.3)	0.90	\$25.00
56047	1434-30	Bottom Cover for above				0.45	\$9.00

HAMMOND

**Hammond Ventilated Metal Chassis Covers (Tube Cages)**

The perfect finishing touch for your DIY power amps are the Hammond 1451 series ventilated covers. The 1451 series has the following features:

- 20 gauge steel ends welded to a perforated steel wrapper
- Punched with 4 holes and supplied with 4 self tapping screws for mounting to chassis
- 3/8" (9.5mm) lip on bottom of side panels
- ASA 61 grey baked enamel finish

Ventilated Cover

SKU #	Dimensions inches (mm)						Price \$US
	Model #	Length	Width	Height	Thickness	Weight (Kg)	
56048	1451-16	10"(254)	6"(152)	5.2"(132)	144X-16	1.0	\$29.00
56049	1451-22	12"(305)	8"(203)	5.2"(132)	144X-22	1.3	\$33.00
56050	1451-30	17"(432)	10"(254)	5.2"(132)	144X-32	1.6	\$41.00

NOTE: The height of the ventilated covers is measured from the top deck of the chassis and does not include the 3/8" bottom lip.

SOUNDCOAT GP-3 DAMPING SHEET

Soundcoat GP-3 is a flexible viscoelastic filled vinyl copolymer damping material that is designed to attenuate structural vibrational energy. It is highly effective in damping metal chassis, CD transport mechanisms, SOME turntables, stamped speaker driver baskets, and other sheetmetal and plastic parts. It is also effective in reducing minor transformer hum when applied to transformer top caps or end bells. Soundcoat GP-3 comes with a "peel and stick" pressure sensitive adhesive system for easy installation and maximum damping. GP-3 is also highly resistant to most common chemicals (water, petroleum, mild acids and bases) as well as ozone and ultraviolet light. It is also flame resistant. GP3 has a service temperature range of 0°C (32°F) to 70°C (158°F) but offers maximum damping properties between 10°C (50°F) and 37°C (100°F). Soundcoat has a lightly pebbled black surface finish.

SKU#	Description	Wt (Kg)	Price \$US
55503	Soundcoat GP-3 0.045" (1.2mm) thick, 12" x 6" (30.5cm x 15.2cm) sheet	0.15	\$4.00/ea
55504	Soundcoat GP-3 Set of four 12" x 6" sheets	0.6	\$15.00/set

E-A-R ISOLATION PRODUCTS

The E-A-R ISODAMP isolation mounts and equipment feet are the most effective devices that we've found for isolating your equipment from structure borne vibration. The high inherent damping properties of the ISOLOSS material eliminates the reactive motion developed when traditional "soft" isolation materials pass through the resonance frequency of the component with the isolator. They are also stronger than traditional soft isolation materials for greater wear resistance. For optimum isolation, roughly calculate the weight of the equipment they will be used with, and select the appropriate number of feet based on the load range per foot. Recommended load range for the large foot is 10-20 lbs, and 5-15 lbs. for the small foot. The male-female isolation mounts are IDEAL for isolating circuit boards from chassis, and can often be directly substituted for 4-40 x 1/4" or 3/8" standoffs. (Just ensure that you ground the board to the chassis at a location close to the original ground with a wire after installing the isolation mounts!)

SKU#	Description	Price \$US
55839	E-A-R Large Isolation Foot 1.5"(38mm) Dia. x 0.75"(19mm) H	\$3.25/ea.
56858	E-A-R Small Isolation Foot 1.0"(25mm) Dia. x 0.52 (13mm) H	\$1.00/ea.
57206	E-A-R 4-40 Male-Female Isolation Mounts 0.28 (7mm) dia. x 0.32 (8mm) mounted height	\$2.00/ea.

SPECTRA DYNAMICS DAMPING PRODUCTS



Deflex Panels

The Spectra Dynamics Deflex Panels are the ultimate materials for controlling internal resonances in loudspeaker enclosures. The Deflex Panels are meant to replace ALL of the internal stuffing and damping inside a loudspeaker enclosure. The panels consist of a vibration absorbing dark grey polymer with a slightly concave surface (1/2" thick at the edge thinning to 1/4" at the center) with a series of concentric serrated ridges designed to control the rear wave from the speaker driver. This prevents internal cabinet reflections from radiating back through the loudspeaker cone and muddying the sound., as well as eliminating internal standing waves. Deflex Panel CONTROL the acoustical energy inside an enclosure, rather than absorb it, resulting in a more dynamic sound even at low volume settings. While a single Deflex Panel on the rear speaker panel behind the woofer will provide a notable improvement, it is recommended that at least 80% of the enclosures internal surface be covered. For ultimate resonance control, Deflex Corner Blocks should also be used to eliminate diagonal reflections. Deflex Panels are attached to the interior cabinet walls using the Deflex adhesive or contact cement. Deflex Panels can be cut to fit using sharp scissors.

While the exact improvements achieved with Deflex panels will vary somewhat between different loudspeaker designs, the most noticeable effects are a more dynamic, punchier sound with better soundstage focus, and a more defined sense of rhythm. Sealed box and reflex speakers are almost universally improved, and while transmission line speakers will also show significant improvements, more experimentation is usually required for optimum results. Deflex panels are re-usable and transferable.

SKU #	Description	Wt (Kg)	Price \$US
56051	Standard Panel 8-1/4" x 11" (21 cm x 28 cm)	0.50	\$12.75/ea
56052	Small Panel 5-1/8" x 9-7/16" (13 cm x 24 cm)	0.30	\$9.50/ea
56053	Subwoofer Panel 13-3/8" (34 cm) dia.	0.75	\$23.50/ea
56054	Corner Blocks Small 2" (50mm) for smaller speakers		\$2.25/ea
56055	Corner Blocks Large 3" (75mm) for larger speakers		\$4.25/ea

Deflex Wrap

A 9/16" (15mm) thick dark grey sheet with straight ribs ideal for damping flat panels found in transmission line and horn loaded speaker systems, or to damp reflex ports or curved surfaces when wrapped around the outside.

SKU #	Description	Wt (Kg)	Price \$US
56060	Deflex Wrap 8-1/4" x 11" (21 cm x 28 cm) Sheet	0.75	\$23.00/ea.



Deflex Sheet

A flat damping and isolation sheet useful for damping metal chassis, CD transports, or for making constrained layer isolation bases for turntables, etc. 8-1/4" x 11" (21cm x 28 cm) sheets in four thicknesses, plus a 0.20" (5mm) thick large sheet.

SKU #	Description	Wt (Kg)	Price \$US
56061	Deflex Sheet 0.08" (2mm) thick 8-1/4" x 11" (21 cm x 28cm)	0.30	\$9.50/ea.
56062	Deflex Sheet 0.12" (3mm) thick 8-1/4" x 11" (21cm x 28cm)	0.40	\$10.50/ea.
56063	Deflex Sheet 0.16" (4mm) thick 8-1/4" x 11" (21cm x 28cm)	0.50	\$11.50/ea.
56064	Deflex Sheet 0.24" (6mm) thick 8-1/4" x 11" (21cm x 28cm)	0.65	\$17.50/ea.
56065	Deflex Sheet 0.31" (8mm) thick 8-1/4" x 11" (21cm x 28cm)	0.80	\$22.00/ea.
56066	Deflex Sheet 0.20" (5mm) thick 8-3/4" x 18-11/16" (22.3cm x 47.5cm)	1.00	\$42.50/ea.



Magnapad Gold

A complimentary product to Deflex Panels, Magnapads are designed to absorb unwanted vibrations directed at driver magnet assemblies, and prevent sound reflections off of the flat magnet surface. Made of the same proprietary polymer as Deflex Panels, with a similar concentric serrated ridge design. 1/2" (12mm) thick, yellow-orange colour.

SKU #	Description	Wt (Kg)	Price \$US
56056	Magnapad Gold 3 - 3" (75mm) dia.	0.20	\$7.00/pr.
56057	Magnapad Gold 5 - 5" (125mm) dia.	0.35	\$11.00/pr.
56058	Magnapad Gold 7 - 7" (175mm) dia.	0.50	\$8.50/ea.
56059	Magnapad Gold 9 - 9" (225mm) dia.	0.75	\$14.50/ea.

Deflex Washers

Flat washers useful for isolating circuit boards or components, transformers, etc. Large size great for toroidal transformer support and isolation.

SKU #	Description	Price \$US
56067	Deflex Washer 1"(25mm) O.D. x 13/16"(20mm) I.D. x 1/4"(6mm) Thk.	\$0.50/ea.
56068	Deflex toroid support 4-3/4" (120mm) dia. x 0.20" (5mm) thk.	\$5.50/ea.

**Foculpods**

An excellent soft foot for placement under vibration sensitive equipment. Made of the same dark grey polymer as the other Spectra Dynamics products, each foot is 2" (50mm) dia. and 3/4" (19mm) high with a hemispherical bottom surface for even contact, uniform energy distribution, and maximum vibration isolation. The maximum recommended load is five pounds (2.3Kg) per foot, and four are recommended per component.

SKU #	Description	Price \$US
56069	Foculpods	\$6.00/ea.

SOLDER, TOOLS & CLEANER

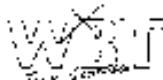
WONDER SOLDER



This solder has a low melting point and sets quickly, minimizing the risk of cold solder joints. The standard audiophile solder.

SKU#	Description	Price \$US
53647	Wonder Solder 16 awg. (thick) 1lb (454g) roll	\$54.00
53648	Wonder Solder 22 awg. (thin) 1lb (454g) roll	\$65.00
53649	Wonder Solder 16 awg. (21.5g) 10 ft	\$6.50

WBT



A 4% silver content solder with a special organic based halogen-free flux. Compared to other conventional soldering materials, this solder gives you optimum electrical conductivity and long-term stability due to its high mechanical strength and corrosion resistance. It also has a low melting point (178-180°C) and good "wetting" action. All these qualities produce the lowest effect on the signal, giving you the best sonics. It is ideal for circuit boards, cables, and connectors.

SKU#	Description	Price \$US
53652	WBT Solder 250g roll	\$55.00
53653	WBT Solder 500g roll	\$95.00
53651	WBT Solder 10m	\$17.00

THE GRANITE CORP

Speedy-Feeder™

Speedy-Feeder™ solder dispenser is a semi-automated solder dispenser that prevents direct contact between you and the solder. This eliminates absorption of solder lead through your skin, contamination of the solder, and reduces finger burns too! Solder feed rate is controlled by a single finger push button. Detachable solder magazines allow you to use different types or gauges of solder, or for even faster change-overs, use on dispenser for each type of solder. You will be surprised at how much faster you can solder with the Speedy-Feeder™. Works for lefties too!

SKU#	Description	Price \$US
53654	Speedy Feeder SD-1 Dispenser	\$9.00
53655	Speedy Feeder SM-1 Magazine	\$4.00
53656	Speedy Feeder SDISM-1 Combo	\$12.00

Lead Benders

Designed primarily for resistors and diodes, these lead benders speed up your board assembly by allowing you to precisely bend component leads to the required length. These two sizes cover most applications.

SKU#	Description	Price \$US
53658	Lead bender 1 Watt size	\$6.00
53657	Lead bender 1/4 Watt size	\$5.00

SOLDER, TOOLS & CLEANER

SOLDER WICK

A finely woven copper braid used to de-solder connections. Perfect for joints too fine or too inaccessible for a solder sucker. A must have for ANY equipment modifier!

SKU#	Description	Price \$US
53659	Solder Wick 10 ft. roll 0.060" wide	\$6.95

SOLDER SUCKER

A spring operated vacuum tool for de-soldering connections. Heavy duty plastic construction.

SKU#	Description	Price \$US
53660	SoldaPult US 140 solder sucker	\$19.95
53661	SoldaPult teflon replacement tip	\$4.95

THE POSTMAN BINDING POST WRENCH



This wrench has two sockets, one 7/16" and one 1/2" in a screwdriver-type handle. It allows easy tightening of hex binding posts and eliminates stripping by over tightening.

SKU#	Description	Price \$US
53678	PostMan binding post wrench	\$6.95

TUBE SOCKET CLEANING TOOLS

These wire and nylon brush "pipe cleaner" type cleaning brushes are ideal for cleaning tube socket contacts. Flexible handles allow easy access. After cleaning be sure to apply ProGold for the ultimate connection.

SKU#	Description	Price \$US
53263	Octal tube socket cleaning brush	\$3.95
53264	9 pin miniature tube socket cleaning brush	\$4.95

PROGOLD - ELECTRICAL CONNECTION CONDITIONER, PRESERVATIVE & LUBRICANT



- Improves Conductivity
- Maintains Optimum Signal Quality
- Protect Base Metals from Oxidation
- Forms Protective Anti-Tarnishing Layer
- Reduces Arcing, RFI and Intermittent Connections
- Reduces Wear and Abrasion
- Extended Temperature Range, -34°C - 200°C

ProGold outperforms all other contact cleaners, enhancers and lubricants. Due to its unique properties, it deoxidizes and cleans surface contamination, and penetrates plated surfaces and molecularly bonds to the base metals - **NO OTHER PRODUCT DOES THIS!** ProGold increases the performance and reliability of all electrical equipment. It improves conductivity for greater definition and dynamics, reduces noise and interference, and lowers distortion. Unlike other products, it also stabilizes connections between similar and dissimilar metals. Provides long-lasting protection (1-10 years) on gold, silver, rhodium, copper, nickel and other precious metals.

SKU#	Description	Price \$US
53663	ProGold Wipes (50 Wipes)	\$20.00
58887	ProGold GP5 Pump Spray (150ml, 100% Solution)	\$19.50
58888	Bottle & Brush Applicator (7.4ml, 100% Solution)	\$18.50

ACCESSORIES & ANALOG

BIASKING

New from Svetlana, the BiasKing - a simple, effective, and accurate diagnostic tool, designed to read the current flowing through the output tube of an amplifier ie. it measures bias. BiasKing works on most octal socket tube amps, usable with 6V6, 6L6, 5881, EL-34, 6550, KT88/KT90 type tubes. Requires NO power source other than the amp it is plugged into, can be used to match tubes into pairs, and is accurate and easy to use. Comes with detailed instructions, and a fancy glove for handling tubes.

SKU#	Description	Price \$US
58848	BiasKing (one tube socket)	\$159.00
58849	BiasKing Pro (two sockets, enabling easy switching between two tubes without having to unplug and replug tubes)	\$259.00

TOP HAT TUBE DAMPER

A new approach to reducing tube microphony! The Top Hat is machined from a slug of high-density metal, into a unique and novel shape. The Top Hat, when attached to a small-signal tube (ie. 9-pin), is designed to lower internal microphonics, and to lower the tube's susceptibility to microphonics induced from external sources. The Top Hat is glued to the top of the tube, using an easily removable adhesive. This allows the Top Hat to be re-used almost indefinitely. The Top Hat kit comes with two Top Hat tube dampers, container of adhesive, and detailed application notes.

SKU#	Description	Price \$US
58452	Top Hat Tube Damper Kit	\$129.95

BLUE TACK

It is a non-reactive, resistive damping mastic which behaves like a tacky, flexible, semi-liquid when being handled but like a solid at audio frequencies. It comes in thin flexible sheets that can be cut up or pulled apart as needed. It provides excellent mechanical energy transmission properties at audio frequencies even though it is a semi solid. It is used primarily between of loudspeakers stands and the bottom of loudspeakers.

SKU#	Description	Price \$US
58500	BLU-TACK (pkg of 12)	\$9.00

TWEETER LENSES

Self adhesive diffraction-absorbing felt rings to enhance imaging, soundstaging of dynamic loudspeakers. Simple, but they work!

SKU#	Description	Price \$US
58499	Tweeter Lenses	\$15.00/pr.

ACCESSORIES & ANALOG

SUMIKO

Blue Point Special

The ideal high-output (3mV) moving coil cartridge to complement the RB300 tonearm. The Blue Point Special (BPS) has gained a large and loyal following around the world, due to its ability to deliver an incredibly musical performance at an eminently reasonable price. The "Blue Point Special" dispenses with the usual protective body around the coil/generator assembly, removing a resonance prone component altogether from the cartridge. This does mean that even more care must be taken in mounting this cartridge to the tonearm, to avoid damaging the more delicate parts of the assembly. But the rewards of taking such care are worth it.

SKU#	Description	Price \$US
58458	Sumiko Blue Point Special, High Output Moving Coil Cartridge	\$319.00

Blue Point MKII

The original, fully clothed version. Now updated to the MKII status, this cartridge features the same mechanism as the Blue Point Special (and output 3mV), but with the exposed internal structure.

SKU#	Description	Price \$US
58459	Sumiko Blue Point MKII, High output Moving Coil Cartridge	\$209.00

REGA

RB300 Tonearm

Well, what can one say about the venerable RB300? The best bang for the buck as far as tonearms go. You can pay more (much more!) for additional features and fancy frills, but not achieve better performance.

SKU#	Description	Price \$US
58454	Rega RB300 Tonearm	\$334.00

RB250 Tonearm

An excellent entry level tonearm. Retains most features of the TB300, but at an even more affordable price.

SKU#	Description	Price \$US
58453	Rega RB250Tonearm	\$209.00

VTA (vertical tracking angle)

Adjustment Spacers

If needed, we can supply 2mm and 4mm spacers for those who need to raise the rear of their Rega tonearm.

SKU#	Description	Price \$US
58456	VTA 2mm	\$12.00
58457	VTA 4mm	\$12.00

AUDIOQUEST ANALOG ACCESSORIES



SKU#	Description	Price \$US
58517	AQ Sorbothane Record Mat,Stops vinyl, glass, metal resonances	\$60.00
58516	AQ HL-5 Headshell Leads,Silk wrapped LC-OFC copper litz	\$15.00
58518	AQ Record Brush,Carbon fiber bristles	\$15.00



AUDITIES

Prints, T-Shirts & Tube Pins, Keychains or Earrings



North of Hollywood Print

Hang a rare dog. A moody shot of an original and rare first pressing of this fabulous collector's LP. Released in 1958, North of Hollywood is a collection of pieces from various film scores composed by Alex North.

Leveled Print

A graphic shot of a classic amp. The glowing turquoise of the McIntosh 2105 level meter within the deep-black painted-glass faceplate.

SKU#	Description	Price \$US
58875	North of Hollywood 16"x24" Full Color Print, Unmounted (shipped rolled in a tube)	\$30.00
58876	Plaque Mounted (on 3/8" Board w/ Beveled Black Edge and Protective Gloss Finish)	\$90.00
58874	Leveled 16"x24" Full Color Print, Unmounted (shipped rolled in a tube)	\$30.00
58875	Plaque Mounted (on 3/8" Board w/ Beveled Black Edge and Protective Gloss Finish)	\$90.00

Tube Pin, Keychain or Earrings



These Raytheon JAN 5703WB Tubes are less than an inch-and-a-half long! Available as a keychain or lapel pin for "him" or as drop earrings for "her."

SKU#	Description	Price \$US
58858	Lapel Pin	\$10.00
58859	Key Chain	\$10.00
58872	Drop Earrings (pair)	\$20.00

Organ of Hearing T

VACUUM TUBE VALLEY
T-Shirts & Bumper Sticker

For every time you felt like ripping your ears off in response to vicious harmonic indignities. The Organ of Hearing is a cathartic release inspired by one audiophile's frustration and van Gogh's ultimate madness.

i hear T

VTV Marching Tubes "Big Tone" T-Shirt - One sided in three colors.

VTV Tube Sunburst T-Shirt - Two-color, black & orange art plus large 2-color RCA tube diagram exploded view on back.



"Audio" - Latin for i hear, to hear, be taught by, learn from.

Audiopath T



VTV Politically Correct Bumper Sticker - "Audio Rule #1: Use a Transistor - Go to Jail - It's the Law".

SKU#	Description	Price \$US
58794	Big Tone T (XL Tan T-Shirt)	\$18.00
58795	Big Tone T (XL Sea-Foam-Green T-Shirt)	\$18.00
58796	Big Tone T (XL Burgundy T-Shirt)	\$18.00
58797	Tube Sunburst T (XL White T-Shirt)	\$18.00
58798	Tube Sunburst T (XL Gray T-Shirt)	\$18.00
58799	Bumper Sticker, 2-col vinyl, 2 1/2" x 10"	\$3.50

n. a person whose aural fixation has crossed into the realm of an audiopathology, characterized by the failure to behave in a socially appropriate manner; the consequences of his behavior are considered maladaptive or detrimental to himself or society; audio consumes him; he can't even go to the bathroom without an audio magazine; he no longer has any non-audio friends.

Sound like anyone you know? Finally, the words that define your passion for audio.
(Printed front and back)

Three-Hundred "B"s T



The renowned 300B, the most sought-after triode power tube, on a background of (count 'em) 300 "B"s.

SKU#	Description	Price \$US
58871	Organ of Hearing T (XL white t w/ full color graphic)	\$25.00
58870	i hear T (XL white t-shirt w/ black type)	\$18.00
58869	i hear T (XL jade-green t-shirt w/ black type)	\$18.00
58868	i hear T (XL royal-blue t-shirt w/ white type)	\$18.00
58866	Audiopath T (XL white t-shirt w/ black type)	\$20.00
58865	Audiopath T (XL off-white t-shirt w/ black type)	\$20.00
58864	Audiopath T (XL forest-green t-shirt w/ white type)	\$20.00
58863	Audiopath T (XL navy-blue t-shirt w/ white type)	\$20.00
58862	Audiopath T (XL black t-shirt w/ white type)	\$20.00
58861	300B T (XL white t-shirt with black ink)	\$20.00
58860	300B T (XL black t-shirt with white ink)	\$20.00

RESOURCE

Mullard Tube Circuits for Audio Amplifiers Mullard Ltd.

This book is a complete guide to building eleven power and control amps for a sound system with vacuum tubes, featuring a four chapter tutorial on sound quality which is a fabled guidance on achieving the best sound with tubes. Other chapters include designs and construction tips for three (SE EL84), seven (PP UCL82), ten (PP EL84) and twenty (PP EL34) watt amplifiers, preamps, mixing preamps, and tape amps.

First published in 1959 by Mullard, one of Britain's premier "valve" manufacturers, this is a do-it-yourself classic, with sheet metal diagrams, parts lists, and performance data. 1993, 144pp, 8" x 10", softbound.

SKU#	Book No.	Title	Wt (Kg)	Price \$US
56072	BKAA27	Mullard Tube Circuits for Audio Amplifiers	1.0	\$16.95/ea

Books are Non-Discountable Items

An Approach to Audio Frequency Amplifier Design

The General Electric Co. Ltd. of England

Subtitled "Seventeen Circuits from 5 to 1100 Watts", this book came out of the research laboratories of The General Electric Company (UK). The first chapter contains a treatise on "The Design of an Audio Frequency Amplifier", including sections on the output stage, driver stage, input stage, and the power supply. Other chapters include designs for amplifiers of varying power capacity with schematics and parts lists. It also includes two preamplifier designs. The book does not contain any constructional information or tips, however. Appendices include a ratings and characteristics table for many commonly used tubes and base connection diagrams.

This book is a gold mine of authoritative information delivered in a straightforward, conservative fashion. It provides firm guidance for the tube enthusiast and full explanations of all the important considerations in designing tube equipment. 1957, 1994, 126pp, 6" x 9", softbound.

SKU#	Book No.	Title	Wt (Kg)	Price \$US
56073	BKAA27	An Approach to Audio Frequency Amplifier Design	1.0	\$19.95/ea

Books are Non-Discountable Items

The Williamson Amplifier D.T.N. Williamson

In April, 1947, D.T.N. Williamson's power amplifier, using excellent quality push-pull output tubes, a special output transformer, and well filtered power supply, became an overnight success.

Here, Williamson takes his reader deep into the design considerations for his power amp and why he made the decisions he did. He offers a lot of practical advice on how to build the units, as well as clear, concise instructions on setting up the new amp. Published by exclusive arrangement by Old Colony Sound Lab, this book is not only a singular resource, but also an important historical document which will give the reader unique insights into the tube designer's problems and compromises. More than 40 detailed illustrations, many of them quite extensive, as well as parts lists, provide complete construction details.

Chapters include: Introduction; Basic Requirements-Alternative Specifications; Details of Chosen Circuit and Performance; Design Data-Modifications, Further Notes; Design of Tone Controls and Auxiliary Gramophone Circuits; Design for a Radio Feeder Unit; Replies to Questions Raised by Constructors; and Modifications for High Impedance Pick-ups and Long Playing Records. 1947, 1990, 40pp, 7-1/4" x 9-3/4", softbound.

SKU#	Book No.	Title	Wt(Kg)	Price \$US
56074	BKAA23	The Williamson Amplifier	0.5	\$4.95/ea

Books are Non-Discountable Items

Operating Features of the Audion E.H. Armstrong

First published in the Annals of the New York Academy of Science in 1917, this pamphlet is a fascinating technical study of the early days of the vacuum tube, and includes the very first authoritative report on the triode vacuum tube's capabilities.

Major Armstrong was the inventor of the superheterodyne circuit, FM broadcasting, and many other engineering innovations. Operating Features of the Audion is also a great introduction to the basic operation of tube amplifier, receiver and transmitter circuits. 1917, 1993, 32pp, 6" x 9-1/2", softbound.

SKU#	Book No.	Title	Wt (Kg)	Price \$US
56086	BKAA26	Operating Features of the Audion	0.5	\$6.95/ea

Books are Non-Discountable Items

Audio Anthology: When Audio Was Young, Volume One

C.G. McProud, editor

Providing a fascinating survey of the first audio amplifiers, preamps, tuners, and speakers designed after the long delays of the depression and WWII, Vol. One of this series features 38 of the best articles in *Audio Engineering* magazine from 1947-1950.

Heavily illustrated. 1950, 1987, 124pp, 8-1/2" x 11", softbound.

SKU#	Book No.	Title	Wt (Kg)	Price \$US
56075	BKAA23/1	Audio Anthology: When Audio was Young, Vol One	1.0	\$16.95/ea

Books are Non-Discountable Items

Audio Anthology: When Audio Was Young, Volume Two

C.G. McProud, Editor

This second volume of the series is taken from the pages of *Audio Engineering* magazine, 1950-1952. In addition to magnetic tape recording aids, Editor McProud presents 45 articles with more great amp, preamp, and loudspeaker designs, as well as the first glimpse at the stereo revolution about to arrive.

Heavily illustrated. 1952, 1989, 124pp, 8-1/2" x 11", softbound.

SKU#	Book No.	Title	Wt (Kg)	Price \$US
56076	BKAA23/2	Audio Anthology: When Audio was Young, Vol Two	1.0	\$16.95/ea

Books are Non-Discountable Items

Audio Anthology: When Audio Was Young, Volume Three

C.G. McProud, Editor

The third volume of the series is a collection of 43 articles from *Audio Engineering* magazine, 1952-1955, which are more diversified than those in the first two volumes. As well as discussing binaural recording techniques, Vol. Three features designs for 7 power amps, 18 preamps, and 12 loudspeakers, including four horn types.

Heavily illustrated. 1955, 1990, 124pp, 8-1/2" x 11", softbound.

SKU#	Book No.	Title	Wt (Kg)	Price \$US
56077	BKAA23/3	Audio Anthology: When Audio was Young, Vol Three	1.0	\$16.95/ea

Books are Non-Discountable Items

Audio Anthology: When Audio Was Young, Volume Four

C.G. McProud, Editor

The 34 articles from 1955-1957 in this fourth collection from *Audio Engineering* magazine take a new tack, emphasizing an overall view of the home sound system and offering guidance on how to plan a system, how to keep it simple, and how to understand and maintain the equipment. Solid state techniques and circuits are introduced here, along with designs for 12 amps and preamps and 6 loudspeakers.

Heavily illustrated. 1957, 1991, 144pp, 8-1/2" x 11", softbound.

SKU#	Book No.	Title	Wt (Kg)	Price \$US
56078	BKAA23/4	Audio Anthology: When Audio was Young, Vol Four	1.0	\$16.95/ea

Books are Non-Discountable Items

Audio Anthology: When Audio Was Young, Volume Five

C.G. McProud, Editor

The major theme of this collection of 48 articles from *Audio Engineering* magazine, published in 1958-1959, is the shift from monophonic to stereo reproduction. Twenty eight years after Blumlein patented the basic stereo idea, its practical implementation finally took place.

Heavily illustrated. 1960, 1993, 144pp, 8-1/2" x 11", softbound.

SKU#	Book No.	Title	Wt (Kg)	Price \$US
56079	BKAA23/5	Audio Anthology: When Audio was Young, Vol Five	1.0	\$16.95/ea

Books are Non-Discountable Items

Audio Anthology: When Audio Was Young, Volume Six

C.G. McProud, Editor

The big news in the sixth *Audio Anthology* of 38 articles (four of which are two-part) is the advent of the transistor. The secondary subject, however, as in the fifth *Anthology*, is the appearance of stereo FM broadcasts. These articles are selected from the pages of *Audio* magazine (previously *Audio Engineering*) from 1960-61.

Heavily illustrated. 1962, 1995, 144pp, 8-1/2" x 11", softbound.

SKU#	Book No.	Title	Wt (Kg)	Price \$US
56080	BKAA23/6	Audio Anthology: When Audio was Young, Volume Six	1.0	\$16.95/ea

Books are Non-Discountable Items

Audio Anthology Three Book Special!

Choose ANY three of the six volumes of *Audio Anthology: When Audio was Young* and save \$8.85!

Please specify which volumes. Note that our normal volume discounts do not apply to this special.

SKU#	Book No.	Title	Wt (Kg)	Price \$US
56081	BKAA23/X3	Audio Anthology Three Book Special	3.0	\$45.00/set

Books are Non-Discountable Items

Audio Anthology Complete Set Special!

Get all six volumes of *Audio Anthology: When Audio was Young* and save \$21.75!!

Note that our normal volume discounts do not apply to this special.

SKU#	Book No.	Title	Wt (Kg)	Price \$US
56082	BKAA23/X6	Audio Anthology Complete Set Special	6.0	\$91.00/set

Books are Non-Discountable Items

RESOURCE

Vintage Hi-Fi Spotter's Guide, Volume One Charles Kittleson, Editor

Copies of catalog pages and advertisements for 1947-1963 Hi-Fi components, including Fisher, Eico, Heathkit, McIntosh, Scott, Harman-Kardon, Marantz, Pilot, Dynaco, Radio Craftsmen, and others. 1991, 87pp, 8-1/2" x 11", softbound.

SKU#	Book No.	Title	Wt (Kg)	Price \$US
56083	BKAE3/1	Vintage Hi-Fi Spotters Guide, Volume One	0.5	\$17.95/ea

Books are Non-Discountable Items

Vintage Hi-Fi Spotter's Guide, Volume Two Charles Kittleson, Editor

As above, containing more ads and catalog pages dating from 1929-1963 and also including Speaker Spotter. Includes amps, preamps, speakers, phonographs, receivers, and other equipment not covered in volume one. 1993, 88pp, 8-1/2" x 11", softbound.

SKU#	Book No.	Title	Wt (Kg)	Price \$US
56084	BKAE3/2	Vintage Hi-Fi Spotters Guide, Volume Two	0.5	\$17.95/ea

Books are Non-Discountable Items

Vintage Hi-Fi Spotter's Guide, Two Volume Set

Charles Kittleson, Editor

Get both volumes of Vintage Hi-Fi Spotter's Guide and save \$3.90! (Note that our volume discounts do not apply to this special.)

SKU#	Book No.	Title	Wt (Kg)	Price \$US
56085	BKAE3/S	Vintage Hi-Fi Spotters Guide, Two Volume Set	1.0	\$32.95/set

Books are Non-Discountable Items

Vintage Hi-Fi and Pro Audio Price Guide

Updated price and grading guide for almost 1,000 vintage hi-fi amps, pre-amps and tuners. Includes Vintage pro audio and theater gear. Also, pro loudspeakers, N.O.S. vacuum tubes and audio transformers.

SKU#	Title	Wt (Kg)	Price \$US
58791	Vintage Hi-Fi and Pro Audio Price Guide	0.5	\$25.00/ea

Books are Non-Discountable Items

Principles of Electron Tubes Herbert J. Reich

Principles of Electron Tubes first appeared in 1941 as a textbook for beginners studying tube electronics technology for the first time. It has since become one of the true bibles in the field of tube electronics, and is now available as a reprint for the first time. Contents include physical concepts, thermionic emission, grid-controlled vacuum tubes, methods of tube and tube circuit analysis, amplifier definition and designs, modulation and detection, tube oscillators, rectifiers and filters, tube test instruments, and more! Very useful for both the beginner AND expert! 1941, 1995, 400+pp, 6" x 9", softbound.

SKU#	Title	Wt (Kg)	Price \$US
56087	Principles of Electron Tubes	1.0	\$34.95/ea

Books are Non-Discountable Items

The Loudspeaker Design Cookbook, Fifth Edition Vance Dickason

The new fifth edition of The Loudspeaker Design Cookbook is newly updated and expanded, with additional sections on auto sound and home theater, as well as updates to other chapters. With over 40,000 copies of previous versions already in print in three languages, TLDC is easily the world-wide best seller on D.I.Y. loudspeaker designs.

The Loudspeaker Design Cookbook contains everything you need to know about building the loudspeaker system you've always dreamed of but could never afford. Topics include: how loudspeakers work; closed box, vented box, passive radiator, and transmission line low frequency systems, cabinet construction and finishes, mid and high-frequency drivers, passive and active crossover networks, proven designs, loudspeaker testing, software, and more! 1995, 165pp, 8-1/2" x 11", softbound.

SKU#	Book No.	Title	Wt (Kg)	Price \$US
56088	BKAA2	The Loudspeaker Design Cookbook, Fifth Edition	1.0	\$34.95/ea

Books are Non-Discountable Items

The Electrostatic Loudspeaker Design Cookbook

Roger R. Sanders, with Barry McClune

This volume is an encyclopedic exploration of all the important issues, trade offs, and technical questions involved in building the radiating, electrostatically-charged panel surfaces which make up the electrostatic loudspeaker.

Construction advice for both flat and curved panels is offered, along with plans for the necessary interfaces, drive requirements, and power supply and crossover recommendations. In addition, Sanders provides guidance for building low frequency systems to support the electrostatics for complete frequency coverage. This book is fully indexed, has a thorough, descriptive glossary; provides excellent information on parts sources; and is capped by a complete bibliography of the literature on this fascinating loudspeaker topology. 1994, 208pp, 8-1/2" x 11" softbound.

SKU#	Book No.	Title	Wt (Kg)	Price \$US
56089	BKAA20	The Electrostatic Loudspeaker Design Cookbook	1.0	\$34 .95/ea

Books are Non-Discountable Items

Bullock on Boxes Robert M. Bullock III, with Robert White

A collection of Bob Bullock's articles on vented box loudspeaker systems from Speaker Builder magazine, this book is an easy to read guide to designing and building vented-box systems based on Thiele/Small models.

Chapters include: Thiele/Small and Vented Loudspeaker Design; Determining Design Parameters for Your Loudspeaker; Fine Points of Vented Loudspeaker Design; Alternative Alignments (including Fourth Order); T/S Calculator Programs (TI-58/59, HP-67/97); BOX RESPONSE: An Apple Program for the Thiele/Small Models; Realizing BOX RESPONSE's Potential; BOXMODEL: An Aid to Woofer system design; and Correspondence and Updates. 1991, 72pp, 8-1/2" x 11", softbound.

SKU#	Book No.	Title	Wt (Kg)	Price \$US
56090	BKAA8	Bullock on Boxes	0.5	\$10 .95/ea

Books are Non-Discountable Items

Loudspeakers: The Why and How of Good Reproduction G.A. Briggs

This easy to read and concise introduction to audio basics with special attention to loudspeaker characteristics is something of a classic. Out of print since 1949, the text goes far beyond consideration of speakers, drivers and boxes.

Briggs introduces the reader to such concepts as impedance, phons and decibels, frequency response, response curves, volume and watts, resonance and vibration, cabinets and baffles, horns, room acoustics, transients, crossovers, negative feedback, transformers, Doppler and phase effects, and efficiency. Although these topics are treated in an introductory manner, they still form a comprehensive summary of early audio technology.

Briggs has a light, breezy style and a gift for explaining difficult concepts simply. He quotes liberally from the best sources available, including Olsen, Henney, Wood, and Seashore. His book also owes much to his fifteen years of speaker manufacture. Liberally illustrated, and although the hardware is dated, the data is surprisingly germane. All in all, readers will find this book to be a pleasant tour through the early years of audio and a provocative survey of the right questions about quality sound reproduction. 1949, 1990, 88pp, 5-1/2" x 8-1/2", softbound.

SKU#	Book No.	Title	Wt (Kg)	Price \$US
56091	BKAA5	Loudspeakers: The Why and How of Good Reproduction	0.5	\$6 .95/ea

Books are Non-Discountable Items

The Master Handbook of Acoustics F. Alton Everest

This revised and enlarged third edition of the classic sourcebook on acoustics offers even more complete, up-to-date, usable information than before. In it, the author covers everything from the basics of sound to the latest technological advances, including frequency, wavelength, octaves, harmonics, the sound spectrum, diffraction grating diffusers, digital reverb systems, white and pink noise, balancing loudspeakers, digital recording systems, multi-track recording, setting up your home listening room, room testing, live-end and dead-end techniques for listening rooms, simple sinusoidal and complex waves, and setting up the control room of a sound studio-all with examples, experiments, and calculations! 1994, 452pp, 7-1/2" x 9-1/2", softbound.

SKU#	Book No.	Title	Wt (Kg)	Price \$US
56092	BKT13	The Master Handbook of Acoustics	1.0	\$24.95/ea

Books are Non-Discountable Items

RESOURCE

The Audio Glossary J. Gordon Holt

Authored by the founder of Stereophile magazine and one of audio's most famous guru's, this best seller is a comprehensive overview of over 1,900 technical and subjective audio terms explained in precise yet sometimes humorous fashion. At last, here is the key to understanding that at-times baffling audio parlance used by experienced audiophiles, including those reviewers who describe how products sound in terms which - until now - you couldn't understand. Gordon Holt pioneered subjective testing and devised most of the language that is now used worldwide to describe reproduced sound, so users of this book are indeed in good hands. With a foreword by Peter W. Mitchell. 27 illustrations. 1990, 152pp.

SKU#	Book No.	Title	Wt (Kg)	Price \$US
56094	BKAA7/S	The Audio Glossary, softbound, 5-1/4" x 7-1/2"	0.5	\$9.95/ea

Books are Non-Discountable Items

Electrostatic Loudspeaker Design and Construction Ronald Wagner

This TAB Books classic is now being published by Audio Amateur Press. Both a "how to" book and an informative text on electrostatic speakers, it provides a step-by-step sequence for building full range electrostatic speakers as well as acquaints the reader with their basic operating principles. The book also describes the important parameters of an electrostatic speaker and indicates how each affects performance. Intended for the audio amateur, musician, craftsman, or anyone else who is not only interested in this type of speaker, but would also like to obtain the very best in sound reproduction.

Chapters include: How It Began; Electromagnetic Speakers; Speaker Measurements; Electrostatic Loudspeakers; Building a Full-Range Electrostatic Speakers; Frames and Ribs; Preliminary Assembly; Preliminary Speaker Testing; Stretching Frame; Final Speaker Assembly; Speaker Mounting Frames; Electronics for Electrostatic Speakers; Speaker Evaluation; and Commercial Electrostatic Speakers. (Because of rights difficulties, not included from the original book is the Chapter 15 by Malme.) Appendix with construction info, Index, Bibliography. 1987, 1993, 256pp, 7" x 9 5/8", softbound.

SKU#	Book No.	Title	Wt (Kg)	Price \$US
56014	BKT6	Electrostatic Loudspeaker Design and Construction	1.0	\$19.95/ea

Books are Non-Discountable Items

Audio Amateur Loudspeaker Projects The Audio Amateur Magazine

A collection of the 25 best speaker articles in The Audio Amateur during the decade of the 1970s, this book is the ultimate proof that great designs are never out-of-date and can still be as challenging and rewarding as they were the day they appeared.

This volume is a rich source of both theory and practice as well as design, and the electrostatic and transmission-line pieces are particularly interesting and useful.

Contents: "The LC/HQ (Low Cost, High Quality) Mark 1," Parts 1 and 2, by Peter J. Baxandall; "An Electrostatic Loudspeaker System," Parts 1 and 2, by David P. Hermeyer; "Reduce Speaker Distortion by Tuning a Pipe" by Nelson Pass; "A Transmission Line Speaker" by J. Theodore Jastak; "How to Photograph Sound" by Edward H. Parker; "An Electrostatic Speaker Amplifier, Mark 2" by David P. Hermeyer; "A Jolly Transmission Line Giant" by J. Theodore Jastak; "A High-Efficiency Mid- and High-Range Horn" by James Nicholson; "Back to the Wall" (In Wall Speakers) by Alan Watling; "A Proven Transmission Line Loudspeaker" by B.J. Webb; "Speaker Evaluation: Ear or Machine?," Parts 1 and 2, by Roger H. Russell; "In Defence of the Ear" by James S. Upton; "The Compact Tower" by Lynn B. Neal; "The Sanders Electronic Speaker," Parts 1 and 2, by Roger R. Sanders; "Design a High Efficiency Speaker System" by Michael Lampton, Robert Bouyer, and William Bouyer; "The Folded and Stapled Bass Horn" by Neil Davis; "An Amateur's Version of the Heil Air Motion Transformer" by Neil Davis; "A High Efficiency Electrostatic Loudspeaker System," Parts 1 and 2, by David P. Hermeyer; "The Big Bass Box" by David Ruether; and "The Little Big Horn" by C.R.B. Lister. Profusely illustrated. 1985, 135pp, 8-1/2" x 11", softbound.

SKU#	Book No.	Title	Wt (Kg)	Price \$US
56015	BKAA1	Audio Amateur Loudspeaker Projects	1.0	\$20.00/ea

Books are Non-Discountable Items

Loudspeaker Recipes Volume One: Two-Way Systems

Vance Dickason

Vance Dickason, bestselling author of The Loudspeaker Design Cookbook brings almost twenty years of experience, research and hands-on knowledge to this new book on designing and building four tested and proven two-way loudspeaker systems.

Dickason shows you how to look for the right driver characteristics to be paired successfully with the right crossover components and also how to fix any anomalies which may trouble your particular choices. Although the four-way systems which are meticulously documented on this book, along with an outstanding general purpose subwoofer, may be built just as they are defined here, you are not limited to building these systems.

Loudspeaker Recipes, Book 1, lays a firm groundwork, both theoretical and practical, for building as many varied and successful two-way loudspeaker systems as you wish. The book benefits from the latest techniques for computer-aided design, but is also rich in proven construction practices for building practical system. Mr. Dickason is not only a published author and Editor of Voice Coil, the monthly newsletter for the loudspeaker industry, a Contributing Editor for Speaker Builder, but is a professional consultant and product reviewer as well. Loudspeaker Recipes, Book 1, provides a powerful tool for any music lover who wishes to build a technically outstanding and satisfying loudspeaker system for home listening.

SKU#	Book No.	Title	Wt (Kg)	Price \$US
56017	BKAA29	Loudspeaker Recipes Vol. 1, Two-Way Systems	1.0	\$24.95/ea

Books are Non-Discountable Items

Audio Amateur Power Amp Projects

By The Authors of Audio Amateur Magazine

Twenty-six of the best articles on power amplifiers from Audio Amateur magazine, 1970-1989. Authors from six countries offer an array of designs, predominately solid state. Profusely illustrated. Softcover, 1996 205pp, 8-1/2" x 11"

SKU#	Book No.	Title	Wt (Kg)	Price \$US
57168	BKAA40	Audio Amateur Power Amp Projects	1.0	\$19.95/ea

Books are Non-Discountable Items

The World of POOGE Various Authors

Reputed acronym for Progressive Optimization of Generic Equipment, POOGE stands for the best traditions of audio tinkering. Seven articles from Audio Amateur upgrade such units as the Marantz 7C, Hafler DH-200, Magnavox CDB-650, Philips DAC-960. Photocopy, 1981-85-88-92-94-96 110pp. 8-1/2" x 11"

SKU#	Book No.	Title	Wt (Kg)	Price \$US
57167	BKAA25	The World of POOGE	0.5	\$24.95/ea

Books are Non-Discountable Items

Of Mockingbirds and Other Irrelevancies Edward T. Dell, Jr.

Collection of Audio Amateur magazine editorials on audio, the passing scene, technical and ethical issues. Contentious, prophetic, philosophical and always entertaining. For the audiophile who thinks he (or she) has everything. Hardcover, 1993, 100pp. 5-3/4" x 8"

SKU#	Book No.	Title	Wt (Kg)	Price \$US
57166	BKAA9	Of Mockingbirds and Other Irrelevancies	0.5	\$9.95/ea

Books are Non-Discountable Items

The Brute: Super Amplifier Edward T. Dell ,Jr.

Stereophile magazine article copied by special permission describes construction of deluxe version of Dynaco ST-70 tube amp, beefed up with massive power supply and metering for all voltages. Photocopy, 1966, 11pp. 8-1/2" x 11"

SKU#	Book No.	Title	Wt (Kg)	Price \$US
57165	BKAA23	The Brute: Super Amplifier	0.5	\$7.95/ea

Books are Non-Discountable Items

Build Your Own Audio Valve Amplifiers Kainer zur Linde

Lots of information on the operation of vacuum tubes, including a short history of the thermionic valve. Fourteen amp, one pre-amp and two guitar amp designs, and an SRPP design for CD player outputs. PCB layouts included for home fabrication. Softcover, 1995, 251pp. 6-3/4" x 9-1/4"

SKU#	Book No.	Title	Wt (Kg)	Price \$US
57164	BKEE36	Build Your Own Audio Valve Amplifiers	1.0	\$36.00/ea

Books are Non-Discountable Items

Build Your Own High-End Audio Equipment

By the editors of Elector Electronics

Solid state designs for three pre-amps, four power amps, three headphone amps, a Dolby surround sound processor, active three way speaker, active crossover, audio system phase check, overview of PC controlled audio measurement system. PCB layouts included. Softcover, 1995, 261pp., 6-3/4" x 9-1/4"

SKU#	Book No.	Title	Wt (Kg)	Price \$US
57163	BKEE38	Build Your High-End, Audio Amplifiers	1.0	\$36.00/ea

Books are Non-Discountable Items

RESOURCE

Audio Measurements Norman Crowhurst

G.E. Essential Characteristics

Famous compendium of measurement and test techniques for audio equipment of the tube era includes discussion of all instruments needed. Covers amplifiers, transformers, pre-amps, turntables, changers (GAAK!) tonearms, cartridges and tape recorders. Softcover, 1958 224pp., 5-1/2" x 8-1/2"

SKU#	Book No.	Title	Wt (Kg)	Price \$US
57162	BKAA41	Audio Measurements	0.5	\$12.95/ea

Books are Non-Discountable Items

RCA Receiving Tube Manual

Reprint of 1959 RCA technical series RC-19. Receiving and picture tube outline drawings, characteristics, and basing diagrams. Softcover, 1959, 384pp., 5-3/8" x 8-3/8"

SKU#	Book No.	Title	Wt. (Kg)	Price \$US
56102	B-654	RCA Receiving Tube Manual	0.5	\$12.95/ea

Books are Non-Discountable Items

RCA Transmitting Tube Manual

Reprint of RCA technical manual TT-5. transmitting tube outline drawings, technical data, and typical circuits. Includes types up to 4KW (!! plate input. Softcover, 316pp., 5-3/8" x 8-1/4"

SKU#	Book No.	Title	Wt (Kg)	Price \$US
56103	B-676	RCA Transmitting Tube Manual	0.5	\$ 12.95/ea

Books are Non-Discountable Items

Reprint of 1973 edition of General Electric manual of ratings, electrical and physical characteristics for receiving tubes, television tubes, and other special purpose tubes. Includes handy list of North American and European tube equivalents, and military/industrial cross reference. Characteristics of all G.E. tubes. Softcover, 475pp., 5-1/2" x 8-1/2"

SKU#	Book No.	Title	Wt (Kg)	Price \$US
56104	B-377	G.E. Essential Characteristics	0.5	\$ 12.95/ea

Books are Non-Discountable Items

Western Electric Tube Data

Operating characteristics, curves, pictures, and hard to find data for 44 Western Electric tube types, including the 300B, 350B, 205D, etc.). Softcover, 1994, 253pp., 8-1/2" x 11"

SKU#	Book No.	Title	Wt (Kg)	Price \$US
56106	B-659	Western Electric Tube Data	0.5	\$ 17.95/ea

Books are Non-Discountable Items

75 Years of Western Electric Tube Manufacturing

Bernard Magers

Former WE senior engineer covers early history of Western electric, complete listing of 750 WE tubes including description, materials, equipment used in, parameters, and dates of manufacture. Softcover, 1992, 144pp., 8-1/4" x 11"

SKU#	Book No.	Title	Wt (Kg)	Price \$US
56105	B-634	75 Years of Western Electric Tube Manufacturing	1.0	\$ 19.95/ea

Books are Non-Discountable Items

Saga of the Vacuum Tube Gerald F.J. Tyne

The evolution of tube development. Photos and facts to identify pre-1930 tube types. Histories of vacuum tube manufacturers. Softcover, 1977, 1994 494pp., 5-1/2" x 8-1/2"

SKU#	Book No.	Title	Wt (Kg)	Price \$US
56107	B-376	Saga of the Vacuum Tube	1.0	\$18.95/ea

Books are Non-Discountable Items

70 Years of Radio Tubes and Valves John W. Stokes

Superb illustrations and photos help describe the history of the receiving tube and the evolution of the home radio receiver. Great source of tube dating and identification data. Softcover, 1982, 1992, 248pp., 8-1/2" x 11"

SKU#	Book No.	Title	Wt (Kg)	Price \$US
57161	BKV1	70 Years of Radio Tubes and Valves	1.0	\$29.95/ea

Books are Non-Discountable Items

Electron Tube Locator

12,000 different tube types with filament/heater characteristics, basing diagrams, and tube functions. Comprehensive listing of European and North American receiving, transmitting, and industrial tubes also includes references to complete data on each. Spiralbound, 1994, 322pp., 8-1/2" x 11"

SKU#	Book No.	Title	Wt (Kg)	Price \$US
57160	BKAE9	Electron Tube Locator	1.0	\$29.95/ea

Books are Non-Discountable Items

Tube Substitution Handbook William Smith and Barry Buchanan

Complete handbook of replacements for vacuum and picture tubes. Accurate, up-to-date, with complete instructions for three sections: vacuum tubes, picture tubes, tube basing diagrams. Softcover, 1992, 149pp., 6" x 9"

SKU#	Book No.	Title	Wt (Kg)	Price \$US
57159	BKS30	Tube Substitution Handbook	0.5	\$16.95/ea

Books are Non-Discountable Items

Radio Tube Manual

Data and basing diagrams on OOA through octals and loctals includes 2 pages on early WE types. Reprint of early manual also gives concise Interpretation of Tube Ratings and Definition of Tube Terms (including amp classifications). Softcover 1987, 39pp. 8-1/2" x 5-3/8"

SKU#	Book No.	Title	Wt (Kg)	Price \$US
57158	BKAE8	Radio Tube Manual	0.5	\$4.95/ea

Books are Non-Discountable Items

The Audio Designer's Tube Register Vol. 1 Tom Mitchell

Complete electrical and mechanical spec's for 6C4, 6C10, 6CG7, 6DJ8, 6EU7, 6K11, 12AT7, 12AU7, 12AX7, 12AY7, 12BH7, 12DW7, 5751, 6922. Each type illustrated by eleven separate graphs based on new data. Cross references also provided. Spiralbound, 1993, 144pp., 8-1/2" x 11"

SKU#	Book No.	Title	Wt. (Kg)	Price \$US
57157	BKMC2	The Audio Designer's Tube Registry Vol. 1	0.5	\$17.95/ea

Books are Non-Discountable Items

RESOURCE

Handbook of Radio, TV, Industrial & Transmitting Tube & Valve Equivalents Bernard Babani Ltd.

Elaborate listings of commercial type equivalents; civilian, U.K. armed forces, US services wartime tubes, US and European receiving tubes, CRT's, radio and TV receiving tubes, professional industrial and transmitting tubes. Index of tube types. Softcover, 1974, 1994, 55pp., 5-3/4" x 8-1/4"

SKU#	Book No.	Title	Wt (Kg)	Price \$US
57156	BKRV6	Handbook of Radio, TV, Industrial & Transmitting Tubes	0.5	\$ 7.95/ea

Books are Non-Discountable Items

A Comprehensive Radio Valve Guide Book 1 Bernard Babani Ltd.

Characteristics and base connections for English and US valves 1934-51. Covers: frequency convertors, screened tetrodes, pentodes, diodes, tuning indicators, regulators, thyratrons, rectifiers, triode amps, TV CRT's, US and UK subminiatures. Softcover, 1951, 1994, 54pp., 5-3/4" x 8.25"

SKU#	Book No.	Title	Wt (Kg)	Price \$US
57155	BKRV1	A Comprehensive Radio Valve Guide Book 1	0.5	\$ 7.95/ea

Books are Non-Discountable Items

A Comprehensive Radio Valve Guide Book 2 Bernard Babani Ltd.

Base connections from 1951-54. Also: frequency convertors, screened tetrodes and pentodes, diodes, tuning indicators, regulators, thyratrons, rectifiers, triode amps, TV CRT's, subminiatures single and twin output valves. Softcover, 1953, 1994, 41pp., 5-3/4" x 8.25"

SKU#	Book No.	Title	Wt (Kg)	Price \$US
57154	BKRV2	A Comprehensive Radio Valve Guide Book 2	0.5	\$ 7.95/ea

Books are Non-Discountable Items

A Comprehensive Radio Valve Guide Book 3 Bernard Babani Ltd.

English, european, US, 1954-56. Screened tetrodes and pentodes, output valves, regulators, thyratrons, TV CRT's. Also section on screened tetrodes and pentodes that appeared too late for classification. Softcover, 1956, 1994, 37pp., 5-3/4" x 8.25"

SKU#	Book No.	Title	Wt (Kg)	Price \$US
57153	BKRV3	A Comprehensive Radio Valve Guide Book 3	0.5	\$ 7.95/ea

Books are Non-Discountable Items

A Comprehensive Radio Valve Guide Book 4 Bernard Babani Ltd.

1956-60 UK, US, USSR, European, Japanese tubes. Index of USSR tubes. Frequency convertors, screened tetrodes and pentodes, tuning indicators, regulators, thyratrons, rectifiers, triode amps, TV CRT's, subminiatures, output valves, and more. Softcover, 1960, 1994, 46pp., 5-3/4" x 8.25"

SKU#	Book No.	Title	Wt (Kg)	Price \$US
56999	BKRV4	A Comprehensive Radio Valve Guide Book 4	0.5	\$ 7.95/ea

Books are Non-Discountable Items

A Comprehensive Radio Valve Guide Book 5 Bernard Babani Ltd.

1960-63 Index of USSR tubes. Frequency convertors, screened tetrodes and pentodes, tuning indicators, regulators, thyratrons, rectifiers, triode amps, TV CRT's, subminiatures, output valves, unclassified valves, and more. Softcover, 1963, 1994, 44pp., 5-3/4" x 8.25"

SKU#	Book No.	Title	Wt (Kg)	Price \$US
56998	BKRV5	A Comprehensive Radio Valve Guide Book 5	0.5	\$ 7.95/ea

Books are Non-Discountable Items

Radiotron Designer's Handbook CD-ROM F. Langford-Smith

The tube electronics hobbyist's bible! The standard tube electronics handbook is now available in convenient CD-ROM format. Tons of theory and practical info covering radio receivers and audio amplifiers. Extensive cross references to other sources. Adobe Acrobat access software included. requires IBM compatible 386+, Windows 3.1+. CD-ROM 1952 4th Ed. 1996 1538pp.

SKU#	Book No.	Title	Wt (Kg)	Price \$US
57229	CDRDH	Radiotron Designer's Handbook CD-ROM	0.25	\$29.95/ea

SORRY, PRINTED BOOK IS NOT AVAILABLE.
CD-ROMs are Non-Discountable Items

Valve Amplifiers Morgan Jones

A classic and practical guide for the tube amp DIY'er. Covers both theory and practice with topics such as circuit analysis, active devices, basic building blocks, component technology, power supplies, power amps, pre-amps, construction, safety, testing and repair. A book almost everyone could learn something from! Softcover, 1995, 374pp., 6" x 9-1/4"

SKU#	Book No.	Title	Wt (Kg)	Price \$US
56997	BKB40	Valve Amplifiers	1.0	\$39.95/ea

Books are Non-Discountable Items

Principles of Power Kevin O'Connor

An excellent practical guide to tube power amp design. Includes a brief history and description of tube types, power supply fundamentals and types, voltage amps, phase splitters, driver stages, output stages (SE, P-P, UL, and unity coupled), cathode and fixed bias, operating classes, feedback and open vs. closed loop performance, noise, design procedures and examples (15 to 400 W), OTL and hybrid amps, protection circuits, tube data for most common tube types, and transformer specifications for Hammond and Plitron models. This book gives you basically everything you need to design and build your own tube amp, and is also great if you just want a complete understanding of tube amp design principles and operation. Spiralbound, 1996, 221pp., 8-1/2" x 11"

SKU#	Book No.	Title	Wt (Kg)	Price \$US
57187	BKPP1	Principles of Power	1.5	\$34.95/ea

Books are Non-Discountable Items

The Beginner's Guide to Tube Audio Design Bruce Rosenblitz

This brand new beginner's guide will assist the most novice in understanding vacuum tube audio and prepare the reader to design with tubes. Written in an easy-to-read style, it will soon become THE text for learning about vacuum tube audio design.

SKU#	Title	Wt (Kg)	Price \$US
58850	The Beginner's Guide to Tube Audio Design	1.0	\$24.95/ea

Books are Non-Discountable Items

High Performance Loudspeakers Martin Colloms

This new fifth edition of the loudspeaker bestseller has been fully revised and updated and includes more new material than ever before. Collom maps the increasing pace of technological change in the industry including multimedia and home theatre, Dolby PROLOGIC, Dolby AC-3 THX and multi-channel surround sound. Also included in this definitive work is the unique non-partisan interpretation of the manufacturer's technologies and claims.

SKU#	Title	Wt (Kg)	Price \$US
58513	High Performance Loudspeakers by Martin Colloms	1.0	\$54.95/ea

Books are Non-Discountable Items

High Performance Audio Power Amplifiers Ben Duncan

Power amplifiers and their performance lie at the heart of audio engineering. This handbook is the distillation of the state of the art. Linking analog electronics, acoustics, heat and music technology; high-end hi-fi and professional PA and recording studio use; theory, modeling and real world practice; design and repair; the old and the new, mainstream and the specialized, this comprehensive guide to power amps is a core reference for anyone in the industry, and any interested onlookers.

SKU#	Title	Wt (Kg)	Price \$US
58514	High Performance Audio Power Amplifiers	1.0	\$56.95/ea

Books are Non-Discountable Items

RESOURCE

Audio Power Amplifier Design Handbook Douglas Self

This is a uniquely detailed and practical manual for the design of audio power amplifiers. Based on a lifetime of a design experience and the results of experimental data, not subjective appraisal, this book provides a complete reference for professional audio designers and engineers.

SKU#	Book No.	Title	Wt (Kg)	Price \$US
58515		Audio Power Amplifier Design Handbook	1.0	\$29.95/ea

Books are Non-Discountable Items

Transformers and Tubes in Power Amplifiers

Menno van der Veen

Menno van der Veen is the designer of the Plitron toroidal output output transformer, and is CEO of ir. buro Vanderveen, a Dutch manufacturer of tubed amplifiers and kits. Originally written in Dutch, and a very popular book among tube amplifier hobbyists in the Netherlands, this English translation is newly available.

Topics covered include: The Specifications of an Output Transformer; The Output Transformer Between the Tubes and the Loudspeaker; The Output Transformer in the Complex Domain; Frequency Domain Calculations with Output Transformers; The Phase Splitter in a Push-Pull Circuit; Power Amplifiers, 10 to 100 Watts; Tube Amplifiers and Feedback; Theory and Practice of Overall Negative Feedback; and Construction Hints. This book is sure to contain a wealth of information for anyone from the budding builder to the experienced designer. 1995, Cirlox bound.

SKU#	Book No.	Title	Wt (Kg)	Price \$US
56101	VDV1	Transformers and Tubes in Power Amplifiers	1.0	\$29.00/ea

Books are Non-Discountable Items

Vintage Hi-Fi The Golden Era Video

A one-of-a-kind video covering the classic post-war and 1950s home hi-fi era. Over 80 classic audio amps, pre-amps tuners, are shown. This video is professionally produced. 34 min VHS NTSC \$25.00

SKU#	Title	Wt. (Kg)	Price \$US
58792	Vintage Hi-Fi - The Golden Era Video	0.5	Reg. \$25.00/ea Special Intro Price \$19.95/ea

Videos are Non-Discountable Items

The Art of Linear Electronics John Linsley-Hood

Linear electronics covers that part of the art concerning the handling of real-life signals of variable size, shape and frequency, such as are found in things like audio amplifiers and radio receivers. This handbook covers the principal aspects of the subject in a way that will not only introduce readers to the basics of linear circuit design but will also allow them to begin to do some design themselves.

Drawing on the considerable practical expertise of the author, this book offers a hands-on approach to the how, what and why of the components and circuitry used in this field, from thermionic valves to the how, what and why of the components and circuitry used in this field, from thermionic valves to the how, what and why of the components and circuitry used in this field, from thermionic valves to MOSFET transistors, and from quartz crystal oscillators to silver oxide button cells. Useful information is also given on topics such as material properties or the conventions used in component labeling and theoretical circuit drawing.

The open approach offers the student an entry to the world of real-life analog electronics. The guidance on practical matters also lays bare a lifetime of experience and helpful advice for the more skilled electronics engineer.

SKU#	Book No.	Title	Wt (Kg)	Price \$US
56016	BH01	The Art of Linear Electronics	1.5	\$32.95/ea

Books are Non-Discountable Items

The Ultimate Tube Substitution Guide

No tube electronics enthusiast should be without this book. Over 10,000 tubes are listed on 240 pages including: audio, radio, transmitting, and special. Features an audio tube section with tube evaluation.

SKU#	Book No.	Title	Wt (Kg)	Price \$US
58793		The Ultimate Tube Substitution Guide	1.5	\$29.95/ea

Books are Non-Discountable Items

**Good Sound: An Uncomplicated Guide to Choosing and Using
Audio Equipment** Laura Dearborn

This book spells out in clear, non-technical language how to make good sound happen for you: how to pick the right equipment and, just as important, how to set up your system so that you can benefit from the best sound possible. The author has picked the brains of the experts and explored the needs of the layman to create a book that does justice to both. A generic owner's manual and a should-be component of every stereo system, Good Sound provides everything you need to know about equipment, setup, maintenance, and the upgrading of your system, as well as the care and preservation of recordings of every kind. 1987, 417pp, 5-7/8" x 9-1/4", softbound.

SKU#	Book No.	Title	Wt (Kg)	Price \$US
56093	BK0M1	Good Sound	0.5	\$12.95/ea

Books are Non-Discountable Items

VACUUM TUBE VALLEY BOOKS & BACK ISSUES

VTV #1 Spring 1995

Vintage Dynaco Tube Equipment, 1955-77 - History and Testing of the 12AX/ECC83 dual triode - Tube Testing Methods + Early Amplification and Amps

SKU#	Vol No.	Title	Wt (Kg)	Price \$US
58781	#1	Spring 1995	0.2	\$6.50/ea

Magazines are Non-Discountable Items

VTV #2 Fall 1995 \$12 US - \$15 Foreign

Heathkit, The Tube Williamson Years 1950-61 - EL34/6CA7 History, Types and Tests - Magnum SE EL509 Amplifier Project by Dave Wolze - 1927-34 Western Electric Theater Sound Systems

SKU#	Vol No.	Title	Wt (Kg)	Price \$US
58782	#2	Fall 1995	0.2	\$6.50/ea

Magazines are Non-Discountable Items

VTV #3 Winter 1995/96

Eico Mono Tube Gear, 1955-62 - Altec Lansing 604 Coaxial Loudspeaker History - Western Electric 300B History and Listening Tests - 300B SE Transformer Listening Tests

SKU#	Vol No.	Title	Wt (Kg)	Price \$US
58783	#3	Winter 1995/96	0.3	\$8.00/ea

Magazines are Non-Discountable Items

VTV #4 Spring 1996

6L6 History, Types and Listening Tests - Vintage Bookshelf Speakers 1955-1965 - Early FM Broadcasting History - HK Citation I & II Amplifier History and Mods

SKU#	Vol No.	Title	Wt (Kg)	Price \$US
58784	#4	Spring 1996	0.3	\$8.00/ea

Magazines are Non-Discountable Items

VTV #5 Fall 1996

The Ultimate FM Tuner Shoot Out - Red Bank Guided Missle Tubes for Hi-Fi - The Birth of the Marantz 10B - Choosing Rectifier Tubes for your Guitar Amplifier

SKU#	Vol No.	Title	Wt (Kg)	Price \$US
58785	#5	Fall 1996	0.3	\$8.00/ea

Magazines are Non-Discountable Items

VTV #6 Winter 1997

Fisher 500, History, Models and Restoration - A Tribute to Avery Fisher by the Fisher Doctor - 6550 and KT88 History, Types and Listening Tests - Loftin-White Amplifier History by Alan Douglas

SKU#	Vol No.	Title	Wt (Kg)	Price \$US
58786	#6	Winter 1997	0.3	\$8.00/ea

Magazines are Non-Discountable Items

RESOURCE

VTV #7 Summer 1997

6DJ8 & Frame Grid Tubes + Listening Tests - Altec 1950s Theater Amps and Modifications - The Great Voice, The Peter Jensen Story - Computing with Tubes, The Savage Art - Uncle Eric's Tube Dumpster, 417A/5842

SKU#	Vol No.	Title	Wt (Kg)	Price \$US
58787	#7	Summer 1997	0.3	\$8.00/ea

Magazines are Non-Discountable Items

VTV #8 Fall 1997

EL84 History, Types & Listening Tests - RCA Tube Mfg at Harrison, New Jersey - 200 watt OTL Amp Project by Allan Kimmel - 300B Listening Tests: NOS and Vintage Types - Bruce Moore Tube Audio Pioneer

SKU#	Vol No.	Title	Wt (Kg)	Price \$US
58788	#8	Fall 1997	0.3	\$9.00/ea

Magazines are Non-Discountable Items

VTV #9 Spring 1998

Big Triodes...Big Sound! 211, 845 History & Data, + Listening tests with 10K SE transformers - Restoration of an Altec 287W - Vintage Audio in Japan + equipment pricing reference guide by Charles Kittleson - The Ampeg SVT: History & Variations by Terry Buddingh - Cathode Bias by John Atwood, Metallic Rectifiers reviewed

SKU#	Vol No.	Title	Wt (Kg)	Price \$US
58877	#9	Spring 1998	0.3	\$9.00/ea

Magazines are Non-Discountable Items

Don't forget, just like our VTV Marching Tubes, time also marches on, and as it does TPC will be stocking VTVs future issues as they become available. Call in often so that you don't miss an issue, or any of our TPC specials.

ORDERING INFORMATION

ORDER INFORMATION

To order from The Parts Connection, just CALL, WRITE, FAX, or E-MAIL us and our staff will be happy to serve you, whether it be an order, quote or a question about any of our products or services.

HOURS: 9:00 am - 6:00 pm Eastern Time Monday to Friday.
Closed for statutory Canadian holidays.

TELEPHONE: 1-800-769-0747 Toll Free Order Line in the U.S. and Canada
(905) 829-5858 - Technical help and general inquiries.
(Answering machine after 6:00 pm and on weekends.)

FAX: (905) 829-5388 - (24 hours a day)

E-MAIL: TPC@sonicfrontiers.com

WEB SITE: <http://www.sonicfrontiers.com/TPC>

MINIMUM ORDER: \$50.00 U.S. not including shipping.

PRICES: All prices are in U.S. Dollars. While we endeavor to maintain prices constant between catalog issues, this is not always possible due to price increases from suppliers, therefore prices may be subject to change without notice.

F.O.B POINT: All Items are F.O.B (Freight on Board) Oakville, Ontario, Canada. The Parts Connection cannot be held responsible for any order once it has been shipped.

SHIPPING: We endeavor to ship all orders within 24 hours of ordering and/or receiving payment. During the very busy times of the year, this may not be possible and will be stated at the time of ordering. Any items not in stock will be back ordered and shipped as soon as they arrive, unless otherwise specified. See back order section for more details.

SHIPPING METHODS: Federal-Express courier - recommended shipping method. This is the fastest method of shipping with next day service by 10:30 to most major North American cities, with two day service to most centers in Western Europe, 2-4 days in Asia. We have negotiated special rates with Federal Express, so in MOST instances Fed-Ex is the least expensive shipping method next to air mail, and is FAR faster. Federal Express also offers the added advantage of package tracking, to ensure successful delivery. Mailfast (TNT Express Worldwide) - Standard (Normally 4-6 working days to most locations in the United States, 10-14 business days internationally). Other methods by request, please specify at time of order.

Note: We now avoid the "Regular" Postal System at all costs.

SHIPPING COSTS: See the order sheet for Fed-Ex and TNT Mailfast rates. Actual shipping costs will not be known until the order is weighed, but our salespeople can provide you with an estimate at the time of order.

PAYMENT: Payment may be made by:

1) VISA or MASTERCARD: Please provide the card number, expiry date, and the name as it appears on the card if different from addressee. All orders to the United States and internationally will now be billed in U.S. Dollars. Canadian transactions will have the U.S. dollar price converted into Canadian Dollars at the current daily exchange rate, plus applicable taxes. (GST, plus the PST for Ontario orders only.)

2) AMERICAN EXPRESS: Please provide the card number, expiry date, and the name as it appears on the card if different from addressee. ALL AM-EX orders will have the U.S. dollar price converted into Canadian Dollars at the current daily exchange rate. The Canadian Dollar total will be converted into the cardholder's local currency on their monthly statement.

PLEASE NOTE: There is a 2% surcharge on American Express orders.

3) MONEY ORDER: (Postal/Bank/Amex/etc.) in Canadian or U.S. dollars.

4) BANK DRAFT OR BANK CHEQUE: again in Canadian or U.S. dollars, and please note that we must allow personal checks to clear before shipping your order.

5) BANK TRANSFERS: (larger orders only, please contact us for details)

BACK-ORDER POLICY: We attempt to keep all items in this catalog in stock, but since this is not always possible due to supply and/or demand situations, we may be back ordered on some items.

Back ordered items will appear on the invoice marked as B/O. Orders with items on back-order are normally held until the back-ordered items arrive from the manufacturer. We will automatically ship in stock items immediately and ship back orders as stock arrives, unless you specify that you want your order to be shipped complete at one time. Back ordered items are shipped to you without penalty. Back ordered items are NOT billed to the customer until they are shipped. Note that due to some supplier lead times and the specialized nature of the products we carry, some of which are made to order, some back ordered items may have long lead times.

CHANGES TO ORDERS: Changes to orders must be made before 12 noon on the day of the order, otherwise the order may already be processed.

SPECIAL ORDERS: Other products not listed in our catalog may be available from our suppliers. Special orders must be placed with a 50% deposit. Please note that certain items can take 3-6 months to arrive due to lengthy supplier lead times. Special order items are not returnable and are not cancelable. Deposits are non-refundable.

WARRANTY: Since we at The Parts Connection do not control the use of the products we sell, there are no expressed or implied warranties beyond those stated herein from the manufacturer, and we will not be responsible for any consequential or indirect damages incurred from improper use or handling (including static electricity). The Parts Connection and Sonic Frontiers Inc. disclaims any implied warranties of merchantability or fitness for any particular purpose. The Parts Connection acts only as a distributor of products manufactured by other companies, and expressly limits its liabilities to any guarantees extended by the manufacturer, which The Parts Connection passes on to the customer. No warranties apply if the goods are in any way altered or modified after delivery by The Parts Connection or its carriers.

PARTS RETURN POLICY: It is the responsibility of the purchaser (i.e. YOU!) to determine the suitability of parts for their intended application when placing their order. You should inspect the shipment upon receipt and satisfy yourself that it is as ordered.

- a) We accept no merchandise for return without a Return Material Authorization number (RMA#) which may be obtained by contacting our order service department and supplying the original invoice number and date.
- b) A credit will be issued for the value of goods returned, less a 15% restocking charge, when the return is due to customer error. All returned goods must be in their original saleable condition and in original shipping containers. Any returned parts that have been soldered, leads trimmed, etc, will NOT be refunded.
- c) Defective or incorrectly shipped merchandise will be fully credited or replaced at our option, subject to inspection of the returned merchandise.
- d) Parts must be returned within 30 days of shipping (or within manufacturers warranty) to be eligible for replacement or credit.
- e) Special order, assembled, or non-stock items are not returnable.
- f) Make sure you check with one of our sales reps on return shipping methods, when calling for an RMA#.

DAMAGED GOODS: All shipments should be inspected upon delivery. Any damages incurred during shipping should be IMMEDIATELY CLAIMED to the CARRIER.

INSURANCE & EXTRA COST: Fed-Ex and Mailfast shipments are automatically insured for \$69.00 US (or \$100.00 Cdn). Additional insurance is available at a cost of \$0.69 US for every additional \$69.00 US (or \$1.00 Cdn for every additional \$100.00 Cdn).

TECHNICAL ADVICE: One of the most valuable services that The Parts Connection offers is the advice of our technicians. All of our technicians are avid audiophiles and have often been in the situations that our customers face. Due to the limited time available, our technicians are available for phone help between 2:00 P.M. and 5:00 P.M. Eastern Time only. PLEASE keep your questions concise and to the point, and have all relevant information at hand, other customers may be waiting! It is often better to put your question, along with all other relevant info, in writing and fax, mail or E-MAIL to us. While we try to answer as many technical inquiries as possible, due to the sheer volume involved we cannot guarantee a response to a technical inquiry. (Besides, we will freely admit that we do not have ALL of the answers!)

SKU# - Stock Keeping Unit number: You will see this reference number beside every one of our parts and products listed for sale as well as on your invoice. The SKU# is a unique product identifier and is used to track parts/products in our inventory system. Space has been provided on our order form for your use and will assist in you receiving the right part/product - the one you ordered!

SUGGESTIONS: Our customers are extremely important to us. If you have any comments or suggestions on our products or services, please feel free to contact us. We need your input to better serve you.

Please take a few minutes to fill in our mini-questionnaire.

Any applicable duties and taxes are the responsibility of the consignee.

ALL PRICES AND AVAILABILITY SUBJECT TO CHANGE WITHOUT NOTICE.

ORDERING INFORMATION

SHIPPING METHODS

A - FEDERAL EXPRESS

While we have several shipping methods available depending on the destination, we recommend Federal Express courier as the fastest and most reliable shipping method to any destination. While more expensive than some alternative methods, the speed of delivery, dependability, and peace of mind are well worth it. In fact, Federal Express GUARANTEES delivery to all major North American centers by 10:30 A.M. the NEXT DAY, and provides two day service to most locations in Europe, Asia, and Central and South America. Our IN-HOUSE Federal Express tracking computer allows us to trace any package, anywhere in the world, within one half hour, typically within two minutes. The reliability of Federal Express allows you total security in knowing that your package will be there on time, and allows us to quickly eliminate delivery problems on the rare occasions that they occur.

The following is a table of Federal Express shipping rates to all destinations. Please note that the weights listed are SHIPPING weights, including packaging. The 1/2 lb (0.2 Kg) rate is for a FedEx Letter, and is suitable for small orders of resistors or small coils of wire that will pack flat. The 2 lb. (1 Kg) rate is for a FedEx Pak. We have a custom packing box to get the maximum space in a FedEx Pak, and this will accommodate most average volume parts orders. Rates to the United States include customs brokerage and duty up to \$5.00 US.

Federal Express Rates - World Wide

Pkg. Wt. Kg. Destination	0.2 (Ltr.)	1 (Pak)	1.5 (International Priority)	2	2.5	3	3.5	4	4.5	5)
Ontario & Quebec (\$Cdn)	8.50	14.00	14.00	15.00	15.50	16.00	17.00	18.50	19.00	19.00
Canada (\$Cdn)	12.50	21.00	22.00	24.00	25.00	27.00	28.00	29.00	31.00	33.00
United States (\$US)	12.50	14.50	16.50	18.00	20.00	22.00	25.00	27.00	29.00	32.00
Europe (\$US)	18.00	22.00	24.00	27.00	30.00	33.00	35.00	38.00	41.00	43.00
Asia (\$US)	18.50	23.00	25.50	28.00	31.00	34.00	37.00	40.00	42.00	45.00
South Pacific (\$US)	29.50	31.50	35.00	38.00	41.00	44.00	48.00	50.00	54.00	57.00
South America & India (\$US)	28.00	35.00	41.00	47.00	53.50	60.00	66.00	72.00	78.00	85.00
Africa; Central & East Europe (\$US)	37.00	42.00	48.00	55.00	61.00	68.00	74.00	81.00	88.00	94.00

NOTES:

- Your daytime phone number is ESSENTIAL for FedEx shipments.
- If you or your company has a Fed-Ex account number, we can bill the shipping charges to your account.
- Saturday delivery is \$15.00 US (\$21.75 Cdn) EXTRA.
- The maximum declared value for a FedEx Pak is \$69.00 US (\$100.00 CDN).
- The reference to "International Priority" in the above table means
- IF YOU ARE NOT SURE OF YOUR WEIGHT, PLEASE ESTIMATE HIGH. WE WILL CREDIT YOU ANY SHIPPING COST OVERPAYMENTS.**

Insurance

Fed-Ex and Mailfast shipments are automatically insured for \$69.00 US (or \$100.00 Cdn). Additional insurance is available at a cost of \$0.69 US for every additional \$69.00 US (or \$1.00 Cdn for every additional \$100.00 Cdn).

TNT Express Worldwide

B - TNT MAILFAST WORLDWIDE (Not available for Canadian destinations)

TNT Mailfast is an expedited mailing method where your package is express air transported to your country or local hub, and then sent via your local mail service. Packages can be sent TNT to any mailing address, including Post Office boxes. TNT service charges INCLUDE brokerage charges, customs, duties and taxes (including VAT). The tables below show the TNT services available, delivery times, and cost.

USA - Transit Time 3-10 business days

Weight (Kg.)	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5
Rate (\$US)	\$7.50	\$9.25	\$10.75	\$11.70	\$12.70	\$13.70	\$14.70	\$15.70	\$16.60	\$17.60
Weight (Kg.)	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10
Rate (\$US)	\$18.60	\$19.00	\$20.55	\$21.50	\$22.50	\$23.50	\$24.50	\$25.50	\$26.40	\$27.40

For each additional 0.5 Kg (1lb) add \$1.00

Europe - Transit Time 10-14 business days

Weight (Kg.)	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5
Rate (\$US)	\$12.00	\$18.00	\$21.00	\$21.50	\$23.00	\$28.00	\$33.00	\$37.00	\$41.00	\$45.00
Weight (Kg.)	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10
Rate (\$US)	\$48.00	\$51.00	\$55.00	\$59.00	\$64.00	\$68.00	\$73.00	\$77.00	\$82.00	\$86.00

Rest Of World - Transit Time 10-14 business days

Weight (Kg.)	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5
Rate (\$US)	\$16.00	\$22.00	\$28.00	\$33.00	\$37.00	\$41.00	\$48.00	\$54.00	\$61.00	\$67.00
Weight (Kg.)	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10
Rate (\$US)	\$73.00	\$80.00	\$87.00	\$94.00	\$99.00	\$105.00	\$112.00	\$119.00	\$125.00	\$132.00

NOTE: IF YOU ARE NOT SURE OF YOUR WEIGHT, PLEASE ESTIMATE HIGH. WE WILL CREDIT YOU ANY SHIPPING COST OVER PAYMENTS.

C - CANADA POST PARCEL RATE (ONLY FOR CANADIAN DESTINATIONS)

Rate (\$Cdn) \$3.00/Kg

MAIL POSTE

NOTE: IF YOU ARE NOT SURE OF YOUR ORDER'S WEIGHT, PLEASE ESTIMATE HIGH. WE WILL CREDIT YOU ANY SHIPPING COST OVER PAYMENTS.